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CHRONICLE OF THE WORLD HEALTH ORGANIZATION

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TENTH ANNIVERSARY COMMEMORATIVE SESSION OF THE WORLD HEALTH ASSEMBLY

To mark the celebration of the tenth anniversary of the World Health Organization, the regular session of the World Health Assembly [1] was preceded this year by a special " Tenth Anniversary Commemorative Session ". At the invitation of the Government of the United States of America, both sessions, as well as the twenty-second session of the Executive Board,[2] were held in Minneapolis, Minnesota. The two-day commemorative session, which was attended by delegates from most of the 88 member states of WHO, was held in the Municipal Auditorium under the chairmanship of Dr Sahib Hassan Al-Wahbi, President of the Tenth World Health Assembly and former Minister of Health of Iraq.

First to address the Assembly was the Honourable P. K. Peterson, Mayor of Minneapolis, who extended to the delegates " a hearty, sincere, and cordial greeting and a deep, warm welcome." He was followed by the Honourable L. Freeman, Governor of the State of Minnesota, who drew attention to the happy coincidence that WHO's tenth anniversary fell in the same year as the hundredth anniversary of Minnesota's statehood, and said that the joint celebration gave the people of Minnesota an opportunity to see an illustration of the kind of progress they hoped for in their second century. He believed that the success of WHO " in mobilizing international co-operation by eighty-eight nations " gave reason to hope that a way might be found " to prevent not only death by disease but death by war."

The type of multilateral co-operation exemplified by WHO was described by the Honourable Francis O. Wilcox, Assistant Secretary of State for International Organization Affairs, as " the diplomacy of the future ". He said that WHO had a " record of solid achievement " and had built " an ever-increasing storehouse of knowledge and experience which today is available to millions of people throughout the world for the improvement of their health and their well-being." He thought that this progress had been possible because WHO had achieved " a remarkably happy blend of the highest idealism with the soundest of practical operating techniques ". He went on:

> It has not attempted to bite off more than it can chew. It has exercised praiseworthy realism in recognizing the limits within which it has to work, and in concentrating its efforts and designing programmes geared to available resources. These programmes not only have had great impact in the present but also serve as clear evidence of what can be expected in the future.

For some people, however, the future is a grim prospect, for they see the population of the world rapidly outstripping its resources —and they believe that WHO is accelerating this process by its efforts to reduce infant mortality rates and to increase man's longevity. Even now, Mr Wilcox said, it is estimated that 1 800 000 new births occur every week, and if the present trend continues, the world will soon be " literally bursting at the seams." Nevertheless, he was not on the side of the pessimists, for he was able to point out that in 1956 world food production was 3% higher than in the previous year, while the world population had increased by only 1.7% in the same time. It was significant " that some of the substantial increases in production occurred in former malarial areas where the work of WHO has been particularly active and effective." This is the answer to those who believe that an improvement in health standards will exacerbate the world's health problem rather than contribute to its solution. As Mr. Wilcox pointed out:

> Quite apart from the moral aspects of this problem, it remains a fact that people who are racked with fever or weak from debilitating diseases cannot

[1] See page 224.
[2] See page 253.

make substantial contributions to their nation's productivity. The World Health Organization is helping to give people in many lands strength and energy to build and produce and grow the things man needs to live a more abundant life.

Finally, Mr Wilcox referred to another aspect of the work of WHO: the contribution it was making to " the creation of those conditions in the world which will form the basis of a lasting peace." This theme was developed further in the message prepared by Mr Dag Hammarskjöld, Secretary-General of the United Nations, and read by his personal representative, Mr Philippe de Seynes, Under-Secretary for Economic and Social Affairs. Mr Hammarskjöld was to have addressed the Assembly himself, but at the last moment other duties had prevented him from being present. He pointed out that nearly all the twelve world institutions within the United Nations family of agencies have been established since the Second World War. The problems of economic, social and technical development for all nations have evolved in such a way since 1945 " as to make organized international co-operation across all barriers of politics, ideology and culture a sheer necessity if each of them is to reap the benefits of the new developments in science and technology without creating new tensions and risks."

But two factors have contributed to limit the funds available to such institutions and to encourage bilateral rather than multilateral agreements: the natural administrative caution of governments, making them reluctant to allocate large funds to agencies still in the experimental stage of development, and the political conflicts of the post-war years. During these years, however, " a well-tried multilateral machinery " has been built up, which has also shown itself capable of adaptation to meet new needs as they arise; and the emphasis has been placed on the need for interagency co-operation and co-ordination, for " every one of our international organizations affects every other and requires its support to a greater or lesser extent." Mr Hammarskjöld believed that there was now a growing recognition of the political as well as the economic value of the " multilateral United Nations approach ". He concluded:

> The United Nations are pioneers in an experimental undertaking in the direction of a better international order. Although still in the early stages of development, they have, I believe, fully justified the faith of the Member governments which established them that such world institutions are essential to the nations in their efforts to cope with the great challenges of our times.

On behalf of the Assembly, the President, Dr Al-Wahbi thanked the United States Government, the Governor of the State of Minnesota, and the Mayor of the City of Minneapolis for their generous hospitality, and recalled some of the contributions made by the United States to national and international medicine. He went on to present an outline of " what WHO has done and what it has learned " during its first ten years of existence. Although when the Organization began its work it was faced with a task " almost frightening in its large simplicity " it was able to profit from the example and experience of earlier health organizations, such as the Pan American Sanitary Bureau, the Office International d'Hygiène Publique, the Health Organisation of the League of Nations, and the Health Division of UNRRA. But, Dr Al-Wahbi said, there was another advantage enjoyed by WHO, of which we are not always sufficiently conscious:

> Health work, by its nature, has one great simplification which is not found in some other international fields. The economic development of one country may, if it is pursued with too narrow a view, be gained at the economic expense of other countries; narrow political ambitions may disturb a country's neighbours; but no country can possibly suffer if the health of its neighbours is improved. There are no ideological differences about health.

One of WHO's main problems is to decide the order in which its manifold tasks should be undertaken. The selection is based on the general programme of work submitted by the Executive Board of the Health Assembly. Instead of a rigid list of priorities, this sets out guiding principles, elastic enough to take account of the needs and circumstances of individual countries. Dr Al-Wahbi pointed out that the WHO Executive Board

has a special character in that it is composed of persons technically qualified in the field of health. The experience of ten years has shown that "health workers of all countries can transcend their national points of view and apply their varied experience to the needs of the Organization in a purely international spirit."

Describing the methods used by WHO to meet requests from governments, Dr Al-Wahbi referred to the unique character of the network of regional offices, through which "there comes to the Organization a sympathetic and clearer understanding of the needs and desires of Member States", and through which also advice and assistance is sent out to the various countries. Among the principal functions of WHO Dr Al-Wahbi mentioned: the collection and collation of medical knowledge by expert committees and other meetings of specialists, the stimulation of research, technical publications, the work on international standardization, and the provision of teachers and the granting of fellowships to further the education and training of health workers. But, he pointed out, "the health of mankind cannot be served by medicine alone." Health, economic prosperity and social progress are all interdependent:

> A poor country has not the resources to build an effective health organization or to undertake campaigns against disease; health workers cannot be provided unless there is a good general education on which to graft the special training; an undernourished population cannot be healthy. WHO has therefore sought and found ways of co-operating with other organizations, with the United Nations, with specialized agencies, with intergovernmental and non-governmental organizations, as well as with scientific institutions and individual workers in all parts of the world . . . We have learnt much of how this essential co-operation can be made practical and effective and we propose to learn more.

Message from the President of the United States of America

The Tenth Anniversary Commemorative Session of the World Health Organization directs our attention to the fact that the nations of the world are working together in harmony for the improvement of the living conditions of all peoples. As a result of the work of the World Health Organization and the stimulating leadership it has given to its member states, millions the world over are spared from disease and sufferings that would have been their lot. The United States is proud of its part and the part of its health leaders in this mutual endeavour. We look forward to even greater accomplishments in the control of diseases, in the building of health services and in the opening of new avenues of medical knowledge through research. We look to the World Health Organization with confidence as a proven instrument through which the nations and the peoples of the world can combine their efforts, in friendship, toward the building of true peace.

DWIGHT D. EISENHOWER

In addition to statements from the chief delegates of 41 member states, the Assembly also heard addresses by Dr Brock Chisholm, first Director-General of WHO, by Dr Milton S. Eisenhower, personal representative of the President of the United States of America, by Sir John Charles, President of the Executive Board, and by Dr Marcolino Candau, the present Director-General.

A message from the President of the United States, with which Dr Milton Eisenhower prefaced his address, is reproduced on page 221. Dr Eisenhower, who is President of the Johns Hopkins University, said he was proud of the part his university had played in the development of the World Health Organization. Not only had the School of Hygiene and Public Health collaborated directly with WHO in research on the treponematoses, but many of the delegates to the World Health Assembly were former students of the University, and the Director-General himself was one of its graduates.

Dr Eisenhower pointed out that for the past decade WHO had been concerned mainly with the conquest of diseases for which methods of control were already known. But as the communicable diseases are gradually brought under control or eradicated, the focus of attention will shift to other problems, such as heart disease and cancer. An early solution of these problems demands an intensification of research on an international scale:

> We need more rapid exchange of ideas and information between laboratories and scientists. We need more opportunities for scientists to meet together and discuss freely their work and their problems. We need to find the gaps in research and fill them. We need to develop research workers and give them scope and opportunity. We need to search worldwide to know where diseases occur and why. We must test, in the laboratory, empirical observations that are made in the field and in the hospitals. We must examine those materials and ideas that have persisted through the centuries as traditions and superstitions in the folklore of the world.

The World Health Organization fills the key role of stimulator and co-ordinator of research. The expert advisory panels now have a total membership of 1400 health experts and close working relations have been established with 1800 institutions and laboratories. But although the record is impressive, said Dr Eisenhower, much more needs to be done. He suggested for the consideration of the Assembly that during the coming year WHO should conduct a special study " to determine how it may most effectively perform its fullest role in research ", and he indicated that the Department of Health, Education and Welfare, on behalf of the United States, would be prepared to support such a preliminary study with a grant of $ 300 000. The initial emphasis, he thought, should be on heart disease and cancer, and he assured the Assembly that if a sound plan could be produced that would merit the approval of Member States, the USA would be prepared to consider providing further substantial support. It was hoped that, as a result of the study, international patterns of effort would be established which might lead, as President Eisenhower had suggested last January, to " a full-scale co-operative programme of science for peace ".

After Dr Al-Wahbi had thanked Dr Eisenhower and asked him to transmit to the President of the United States of America the gratitude of the Assembly for " this mark of his interest ", he called on Sir John Charles, President of the Executive Board, to address the delegates. Sir John did not intend, he said, to deal with " the milestones of progress or with the minutiae of the economics of the Organization ". He was more concerned with " the blossoming of ideas, with the flowering of co-operation, with the greater and growing united willingness to serve, not national interests only, but the good of mankind ". He was at pains to show, too, that the concept of health as " a state of complete physical, mental and social well-being and not merely the absence of disease or infirmity " was not new; it recalled and re-echoed " the voices that like a great bell have rung down the ages ". Nearly 1800 years ago Galen had proclaimed: " Health is a sort of Harmony . . . and not merely that condition in which, suffering no pain, we are not impeded in the activities of life." But the concept of health " as one of

the endowments of the human individual, and of that summation of individuals, the nation, and of that totality of nations, the world " was relatively new. The achievements of the past ten years were exciting, but " the faith, which was the forerunner and the moving spirit of those achievements, is of even greater importance." For money and material were not in themselves sufficient to ensure " the fulfilment of the undertakings, the aims and the ambitions, and the responsibilities of the World Health Organization. It needs not only the devotion but the labours —labours in a multitude of vineyards—of human beings."

The addresses delivered to the Assembly by Dr Brock Chisholm, first Director-General of WHO, and by Dr Marcolino Candau, its present Director-General, were in a sense complementary: Dr Chisholm spoke of the important role of the Executive Board and the Secretariat, while Dr Candau paid a tribute to the contributions of the Member States.

Dr Chisholm described the Executive Board as unique, in that it is made up of individuals whose responsibility is wholly to the World Health Assembly and not to their government in any degree whatsoever. He stressed that if the Board were made up of representatives of governments it would become a political body whose technical advice could never again be relied on by the World Health Assembly. " The integrity of the Executive Board ", he said, " is basic to the integrity, the reputation and the fulfilment of the destiny of the World Health Organization." With reference to the Secretariat, Dr Chisholm pointed out that the formation of an international civil service from a group of national individuals was a slow, growth process, and that it may take some time to establish traditional attitudes toward service to the peoples of the world, independently of the country of origin of any particular member of the Secretariat. For this reason a high degree of continuity is of the greatest possible importance.

Dr Candau said that it was most gratifying to all concerned that WHO is today nearer than ever to the goal of universal membership. Even more important was the fact that nearly all the Member States now participate fully and actively in the basic functions of WHO. The steady increase in the regular budget—from five million to nearly fourteen million dollars over the last ten years—was " tangible proof of the confidence of governments in WHO." More precious even than financial participation, however, was the willingness of countries, at whatever stage of their development, to make available skilled and specialized manpower. More than a thousand of the world's leading health experts were members of the expert advisory panels, and during a one-year period 1100 WHO fellows had been received by 577 institutions in 42 countries. Dr Candau also spoke of the " truly spectacular network of scientific centres " whose research work is co-ordinated by WHO and of the thousands of research workers all over the world, to whose participation in " this great international co-operative programme " we owe the prospect of ultimately defeating poliomyelitis, influenza, rabies and other public health menaces.

* * *

It is natural that the impact of the assistance provided to governments by WHO should have been greatest in the countries that were technically less well developed. Most of these countries lie in tropical or subtropical areas and were formerly ravaged by endemic and epidemic diseases; their delegates were often able to report that malaria and yaws had been eradicated or were in the process of eradication, and that a large measure of control had been achieved over such diseases as cholera, plague and smallpox. There were many reports, too, of considerable progress in building up national public health services to the point where they will be able to stand on their own feet—the ultimate aim of the WHO programmes. The results achieved are a testimony not only to the value of international co-operation through WHO, but also to the efforts made by the governments of these countries to make the best possible use of the assistance provided. Nevertheless,

it was pointed out that in some instances WHO is handicapped by the fact that countries have not yet reached a level of development sufficient to enable them to benefit to the full from the discoveries of modern medical science.

In contrast to these areas were those countries that already had well-developed public health services and were relatively free from pestilential diseases. Although some of them had not had to call on WHO for any field assistance, they had found the technical work of the central office of the greatest value. Particular mention was made of the production of the *International Pharmacopoeia* and the establishment of international standards, of the work on narcotic drugs and food additives, of the Epidemiological Intelligence Service, and of the publication of the *Manual of the International Statistical Classification of Diseases, Injuries and Causes of Death*. Of special interest also were the reports of the expert groups, published in the *Technical Report Series*, and the *Monograph Series*.

Many delegates also stressed the fact that, in view of the speed of modern communications, no country can afford to be disinterested in the state of health of its neighbours. An epidemic commencing in one country can, within a matter of days, be a serious problem to every other country in the world. As the Honourable Francis Wilcox had earlier expressed it: "In the field of health we have passed the point of no return. International co-operation is not only sensible and desirable, it is absolutely essential."

ELEVENTH WOLRD HEALTH ASSEMBLY

The Eleventh World Health Assembly, which was held in Minneapolis, Minnesota (USA) from 28 May to 13 June 1958, was attended by the delegates of 85 Member and Associate Member States. In view of the fact that the Organization is this year celebrating its tenth anniversary, the regular session of the Assembly was preceded by a special commemorative session, an account of which is given on p. 219.

In opening the regular session, Dr S. Al-Wahbi, President of the Tenth World Health Assembly, extended a particular welcome to the delegates of Czechoslovakia, the Federation of Malaya, and the recently formed United Arab Republic. Czechoslovakia had resumed active participation in the work of the Organization at the beginning of this year, and the Federation of Malaya became a member of WHO on 24 April 1958.

The Assembly unanimously elected Dr Leroy E. Burney, Surgeon General of the US Public Health Service, as the new President. The three Vice-Presidents elected were: Dr J. Anouti (Lebanon), Dr A. Sauter (Switzerland), and Dr Tran Vy (Viet Nam). The Chairman of the Committee on Programme and Budget was Professor N. N. Pesonen (Finland) and the Chairman of the Committee on Administration, Finance and Legal Matters was Mr S. Khanachet (Saudi Arabia). The Executive Board was represented by Sir John Charles and Dr P. E. Moore.

In his inaugural address, Dr Leroy E. Burney said WHO's efforts during its first ten years had been concentrated largely on the fight against the major communicable diseases. Although steady progress was being made, these diseases still sap the life and energy of millions. Our initial success, he continued, "should not permit us to slacken our efforts nor to fail to plan wisely for the future. For every child that is today saved from dysentery, we will have an adult who may eventually acquire a chronic illness. For every young worker who is today spared from premature death from malaria, we will have an older person who may develop one of the diseases of later life."

Like many of the delegates in the subsequent discussions, he emphasized the necessity for more research. " We need " he maintained, " to intensify our study of the basic physiological and biochemical processes that underlie human health and disease. We need to know more about how and at what rate various organs of the body age and deteriorate. We have few answers to any of these problems, and until we begin to get those answers our efforts to prevent and control the chronic diseases will remain limited." Dr Burney went on to discuss some of the ways in which WHO can help to speed up research, for instance by bringing together medical scientists in various types of meetings, by acting as a world clearing house of public health knowledge, and by effective co-ordination.

He referred also to the importance of intensifying training activities, so that " what we know is used, in a constantly expanding sphere, to prevent and to cure illness "; and he considered it " a paramount responsibility of the world health community to reduce the lag between the discovery of new knowledge and its application." Lastly, Dr Burney drew attention to the need for wider public participation in health work. Because of the complexity of the newer health problems, he said, we must be prepared to go far outside the traditional health setting to make effective progress. In the case of chronic diseases, restoration of the patient to functional independence may be complicated by social factors, such as lack of family ties, inadequate living arrangements, or lack of a job suited to the patient's physical status. After treatment must come rehabilitation. Successful rehabilitation services not only bring great gains in human happiness, but they also result in impressive economic gains. " Individuals restored to active normal lives may become economic producers as well as consumers, and, moreover, need no longer immobilize many well persons in providing permanent and constant care."

Dr Burney concluded his address with a call for leadership and added: "... we must meet boldly and with action not only the challenging health problems of today but those of tomorrow and of the generations to come . . . We can look at the past with great pride; we look to the future with great anticipation. We can meet these challenges of the present and the future by working together—WHO, all nations, organizations and individuals. I have complete confidence that we shall not fail either ourselves or the people we serve."

REPORT OF THE DIRECTOR-GENERAL

The Director-General, introducing his report on the work of WHO during 1957,[1] said that, as in the preceding years, a considerable part of WHO's resources had been devoted to the attack on communicable diseases, which remained one of the basic challenges of the Organization. The outstanding development had been the launching of the campaigns for the eradication of malaria. " The progress made," he continued, " is due largely to the growing co-operation of many countries. If this attitude is maintained and extended with regard to the other major preventable diseases, we may expect during WHO's second decade to witness an almost complete transformation of the present epidemiological picture throughout the world."

One indication of the direction in which WHO's work was likely to develop in the future was to be found in the repeated references made in the report to the co-ordination of research. As examples, the Director-General mentioned the studies being carried out on the control of tuberculosis, on the epidemiology of leprosy, on sylvatic plague, and on rabies and brucellosis. The work of the expert committees and study groups was of growing importance, and enabled WHO to keep at the disposal of member governments up-to-date information concerning new advances of public health importance. Not the least of the Organization's responsibilities was to inform Member States of health dangers resulting from new discoveries and technical developments, and

[1] *Off. Rec. Wld Hlth Org.*, **82**; see also p. 254 of this issue of the Chronicle.

to advise on the precautions to be taken against such hazards.

One of the most pressing immediate needs continued to be the strengthening of national health services, especially the development of training facilities. During 1957, over 100 international teaching personnel had been provided and over one thousand fellowships awarded. Several professors of preventive medicine from selected countries had been given the opportunity of receiving advanced training at a well-known school of public health in the United States of America, an experiment that had yielded encouraging results.

The Assembly noted with satisfaction the manner in which the programme of the Organization had been carried out during 1957 and commended the Director-General on the work accomplished. The discussions that took place on the Director-General's report gave the delegates an opportunity to describe the progress made in their countries over the past year and to express their views on the types of project on which they would like greater emphasis to be placed in the future. For a comprehensive account of the discussions, which ranged over a great many aspects of public health, the reader is referred to the verbatim record of the plenary meetings and the minutes of the committees and sub-committees.[2] The following summary is intended only to give an idea of the type of discussion that took place and does not, of course, represent a complete picture of the work that is being done in these fields. Certain important questions, which were debated at considerable length by the Assembly, are dealt with in more detail.

Tuberculosis

Several delegates reported that very satisfactory progress had been made in their countries in combatting tuberculosis. In the Netherlands, for example, the mortality rate has fallen to 4.6 per 100 000 and the morbidity is fast decreasing. The anti-tuberculosis campaign is now being directed towards special groups of the population, especially adolescents in schools and industry. The Irish delegate stated that in his country the death rate from tuberculosis in 1957 was 21 per 100 000, only one-sixth of what it was in 1947. In Iran, more than 700 000 people have been subjected to the tuberculin test and 400 000 of them vaccinated with BCG; the construction of four sanatoria has been completed and four outpatient tuberculosis clinics are about to be put into operation. In Pakistan, seven million people have so far been vaccinated with BCG; the control schemes set up in Karachi have done excellent work in training medical, nursing and technical staffs, and activities have now been extended to East Pakistan. BCG vaccination is also making good headway in Honduras; the first tuberculosis dispensaries have been set up, and two tuberculosis hospitals with specially trained personnel are already operating.

Leprosy

The delegate of Ghana gave an account of the development of the leprosy service in his country since a full-time leprologist was first appointed in 1947. Previously, lepers had been looked after in three main leper settlements by district medical officers on a part-time basis. The first supplies of sulfone drugs became available towards the end of 1948, but it was not until the introduction of diamino-diphenylsulphone (DDS) that a real expansion of the service could be undertaken. The greatest development, however, was the introduction and extension of outpatient treatment facilities. Special auxiliaries of the leprosy service toured the country holding clinics in the small villages. Two years ago, with the help of WHO and UNICEF, a land-rover service was introduced, making it possible to carry treatment into remote areas. The attendance at such travelling clinics is 80-95%, compared with a maximum of about 70% at static clinics. It is estimated that there are some 50 000 persons suffering from leprosy in Ghana, and so far 32 000 have been treated. During 1957, 2519 patients were issued with discharge certificates.

[2] *Off. Rec. Wld Hlth Org.*, 87

The Regional Director for Africa stated that, in the Region as a whole, there were estimated to be at least two million persons affected with leprosy. Almost one million of them were receiving regular treatment already and it seemed likely that in the near future all leprosy cases in the Region would be under regular treatment.

In the Philippines, the delegate of that country reported, more than 4000 new cases of leprosy have been admitted to sanatoria during the past four and a half years, and another 4000 have been discovered and treated in mobile and stationary skin clinics. About 3400 patients have become negative and nearly 2000 of these discharged. The attitude of the public towards leprosy was becoming more enlightened, but in many places discharged patients were still not readily accepted back into the community and there was a need for further education.

Yaws

In the African Region it is estimated that some twenty million people were affected by yaws; thirteen million of the population in endemic areas have already been examined and more than seven million treated. The Regional Director said it was believed that the disease could be eradicated in the Region in the near future. The post of regional adviser on yaws has been dropped, since most of the yaws campaigns have reached the stage of consolidation and integration within the regular public health services. The Liberian delegate announced that the elimination of yaws was almost complete in his country, and said the success of the campaign had been a great stimulus to public health programmes throughout the country. In Ghana, a total of 1 300 000 people were examined for yaws in 1957; 114 000 cases had been diagnosed and treated, and 480 000 people had been given prophylactic injections of penicillin. The delegate of Nigeria stated that in his country the campaign against yaws had succeeded brilliantly; the decrease in prevalence had been so great that its total disappearance was only a matter of a few years. He said it would be interesting to see whether the disappearance of yaws would be followed by an increase in syphilis. Commenting on this point, the delegate of Haiti remarked that in his country, where the yaws eradication campaign had also proved very successful,[3] the disappearance of yaws had been accompanied by a decrease in the incidence of syphilis, both in urban and in rural areas.

Smallpox

The Regional Director for the Americas was able to report that since 1954 no cases of smallpox had occurred in North America, Mexico, Central America or the Caribbean area, and that there had been a considerable reduction in incidence in South America. The decision to attempt the eradication of smallpox in the Western Hemisphere was taken by the Pan American Sanitary Conference in 1950. The initial emphasis was on the development of a dried vaccine which would be stable in tropical temperatures, and a number of laboratories for the production of dried vaccine had been installed. Assistance in the production of dried vaccine is also being provided in the Eastern Mediterranean Region; the Regional Office is supplying lyophilization apparatus and sending an expert with it to advise national health administrations on its use. Plans have also been made for eradication in this Region. Starting in October 1958, a regional survey team, including an epidemiologist and a laboratory expert, will visit all countries in the Region and advise governments and the Regional Office on eradication measures. The Iranian delegate reported that more than 4 500 000 people had been vaccinated in the course of the past year, and that more than 4 000 000 doses of vaccine had been supplied to neighbouring countries. A highly successful campaign against smallpox has also been waged in Korea. As a result of compulsory mass vaccination, the number of cases of smallpox has been reduced to less than ten a year out of a population of 23 000 000. A proposal put forward by the

[3] A special article on yaws eradication in Haiti was published in *Chron. Wld Hlth Org.*, 1957, 11, 214.

USSR delegate that WHO should institute a plan aimed at the world-wide eradication of smallpox is discussed on p. 231.

Onchocerciasis

The French delegation described a programme for the control of onchocerciasis in French West Africa, where this disease remains a serious problem. Detailed maps will first be prepared, showing all water points where the speed of the current is sufficient for the breeding of the simulium larvae. Teams of trained personnel will then be sent out to treat all the breeding places with larvicides. Patients will, of course, continue to receive medical attention. It was stated that such a programme could achieve not only control but eradication, provided that neighbouring countries in which the disease is prevalent also instituted similar campaigns. A course dealing with the clinical, pathological and therapeutic aspects of onchocerciasis is being arranged this year by the Regional Office for Africa.

Environmental sanitation

The question of environmental sanitation received great emphasis during the discussions, both in the plenary meetings and in the meetings of the Committee on Programme and Budget. Several delegates pointed out that infantile diarrhoea and other gastro-intestinal diseases due to infected water supplies constitute a major public health problem in their countries, and some concern was expressed that WHO did not appear to be devoting sufficient attention to this problem. The Australian delegate said he had been alarmed to find that plans were being made for psychiatric programmes and similar activities in countries where the water was undrinkable. The Indian delegate pointed out that, in the South-East Asia Region, environmental sanitation projects were under way in Afghanistan, Burma, India and Ceylon. WHO's function was to act as a catalyst and stimulate governments to action. Nevertheless, he thought that more might be done in the way of pilot projects, and he hoped that in future environmental sanitation and water supply would receive greater emphasis. The delegate of Indonesia suggested that WHO should make a study as soon as possible on how best it could help governments to overcome their problems of environmental sanitation in rural areas. In reply to some of the points raised, it was stated on behalf of the Director-General that one of the basic deficiencies in country programmes of environmental sanitation had been the lack of properly trained personnel at the supervisory and auxiliary levels. WHO had therefore devoted its efforts particularly to the training of advisers and staff. The Organization was fully aware of the importance of environmental sanitation and was giving all assistance within its power. About half a million dollars had been set aside for expenditure on environmental sanitation in 1959. As a number of speakers had pointed out, the reason for the relatively slow development in the field of environmental sanitation was the large capital outlay required from the countries themselves. At the present moment, WHO is preparing a guide on the operation of water treatment plants and has just published a monograph on standards of drinking-water quality.

The USA delegate pointed out that, although from the time of the First World Health Assembly, the importance of environmental sanitation for the attainment of the Organization's objectives had been repeatedly stressed, more than half the total population of the world still lacked safe water. He suggested that in the next five to ten years, Member States, with the leadership of WHO, should focus their efforts on bringing safe water to the homes of their peoples in quantities enough to provide for simple cleanliness and comfort. It was just as practicable, he maintained, to bring water supplies to smaller communities as to the large urban populations. He went on to say that, time after time the high capital cost of water supply schemes was invoked as a reason for lack of progress or action, but such a pessimistic outlook was completely unwarranted. He thought that WHO should undertake a study on ways and means of

financing community water schemes through long-term, low-interest loans. With a view to translating these ideas into action, the Assembly requested the Director-General to make a comprehensive review of the work of WHO in assisting Member States in the field of environmental sanitation, with particular reference to the provision or improvement of potable water supplies and the adequate disposal of human wastes. This review is to be submitted to the Twelfth World Health Assembly, together with suggestions for further activities, including ways and means of financing the work.

Other aspects of environmental sanitation discussed were hygiene and sanitation in aircraft, and the reduction of air pollution. The delegate of the United Kingdom of Great Britain and Northern Ireland reported the introduction of legislation to prohibit the emission of dark smoke from chimneys, to regulate the emission of grit and dust from furnaces, and to prevent smoking nuisances. Advisory bodies, known as Clean Air Councils, have been set up in England and Wales and in Scotland. Particular attention is being paid to education of the younger generation, and it is hoped that with the co-operation of industry and the public a major advance will be made in solving the problem of air pollution in the United Kingdom and that this will contribute to a reduction in the heavy load of respiratory diseases.

Training of health personnel

The provision of adequate training facilities for physicians, nurses, and auxiliary health personnel continues to be one of the basic problems facing public health administrations, particularly in the less well-developed countries. Many of the delegates spoke on this question and it was clear from their accounts that great efforts are being made to improve the situation. The Philippines delegate, for example, stated that the first step towards an integrated health service had been to establish a national office to facilitate and co-ordinate training. Five area training centres had then been created and each would eventually expand to become a comprehensive medical centre combining hospital care and nursing education with training in public health and in the many disciplines involved in the various aspects of preventive and curative medicine. In 1954, the Institute of Hygiene of the University of the Philippines, which had been training physicians in public health since 1927, had expanded its curriculum to include at graduate level public health engineering, public health nursing, and health education. The Department of Health was planning to strengthen basic education, and the deans of four leading medical schools had been sent abroad to study developments in modern medicine. During the past four years, nearly four thousand health personnel had received in-service training in the five area training centres or the central office; in addition, short-term training (2 to 3 weeks) had been given to 1810 affiliates from nursing schools and 978 affiliates from midwifery schools during the past three years.

The delegate of Spain believed that the most important task of medical schools and universities today was to inculcate into the students the principles of preventive medicine. In Spain, a specially trained body of physicians had been formed for service chiefly in rural centres, where they functioned as obstetricians and child care specialists. In Mexico, the delegate of that country reported, the Ministry of Public Health has already taken steps to sponsor departments of preventive medicine in the various university medical schools, and it is planned that in five or six years' time the universities themselves shall take over the functioning of these departments. He wondered whether WHO's present efforts could not be supplemented by seeking some means of financing, for the time being, departments of preventive medicine in medical schools where government action to that end had not yet been possible.

The delegate of India said that there was general concern to secure the use of modern methods of teaching in medical schools in order to provide a balanced programme of study, relating preventive medicine to the basic subjects; otherwise a decade or more might elapse before the new concept of integrated curative and preventive medicine

could be put into practice. He suggested that a better way of achieving this objective than by the award of fellowships spread over several fields would be for WHO to provide visiting professors, specialists in preventive medicine, for certain medical schools, which could then be up-graded and used to serve a wider area. The Indonesian delegate stressed the need for training greater numbers of better qualified paramedical personnel, and suggested that WHO should make a study of the best type of education and training for paramedical personnel in an integrated health service. It was stated on behalf of the Director-General that the provision of teachers for pre-medical and pre-clinical training was recognized to be of great importance to the less developed countries, and it was pointed out that WHO was already providing many teacher-training staff in basic subjects. Visiting teams of medical scientists often included a specialist in one or more basic subjects, and the experience of such teams would improve future plans. The suggestion made by the delegate of India was extremely interesting and would be given careful study.

Public health services

The discussions on public health services centred mainly around two questions: health education of the public and maternal and child welfare. The question of health education has been receiving considerable attention in the Federal Republic of Germany, where the second international conference on health education was held in 1957. A further international seminar on this subject will be held in Germany in 1958, and WHO is providing two lecturers as well as a number of fellowships. The work of some hundred voluntary organizations is being co-ordinated by the German Federal Committee on the Health Education of the Public. This committee also collaborated with the International Union for the Health Education of the Public in preparing material for the technical discussions on health education which are scheduled to take place at the Twelfth World Health Assembly.

Several delegates emphasized the importance of maternal and child health and the necessity for integrating this work into the general health services of the country. The delegate of New Zealand stated that in some countries, WHO projects were planned in such a way that they would fit into the health services of the countries concerned, but unfortunately this was not true of all countries. Unless integration was planned from the beginning, it would prove difficult to achieve when the projects were completed. On behalf of the Director-General, it was explained that the primary objective of WHO was to assist governments to set up adequate national health services. Where a particular type of service did not already exist, projects had had to start as separate ventures, but the ultimate aim had always been to integrate them into the national service.

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BUDGET FOR 1959

The Director-General, introducing his budget estimates for 1959, stated that he proposed an effective working budget of $14 287 600, which represented an increase of some $721 000, or 5.3%, over the effective working budget for 1958. In the subsequent discussions, all the delegations expressed their approval of the proposals, and at the suggestion of the delegate of India, the budget was adopted by acclamation. It was decided that the budget level for 1959 should be established in an amount equal to the effective working budget, plus the assessments on inactive Members and on China.

PROGRAMME FOR 1959

Health and vital statistics

In accordance with a request made by the Tenth World Health Assembly, the Director-General had submitted to the Executive Board a progress report dealing especially with the past and present work of WHO in vital and health statistics. The United States delegate was of the opinion that the additional

projects suggested for the immediate future represented a substantial contribution to the quantitative aspects of public health planning and administration. For decades past, public health administrators had been hampered by lack of reliable data on health services, but recent progress in scientific sampling methods and health survey techniques might enable this obstacle to be overcome. Many new avenues were opening up for the use of statistical methods in public health, and WHO now had the opportunity to play a progressive role in determining and exploiting appropriate methods of all types. Several other delegates spoke along similar lines, and there was general acceptance of the view that WHO should now take more active steps to encourage the acquisition of up-to-date statistical data on health and disease from all feasible sources. The Assembly requested the Director-General to continue his study in this field with the object of submitting a final report to an early session of the Executive Board, and to include in this report recommendations on a forward-looking and balanced programme for the development and strengthening of systematic procedures for securing adequate vital and health statistics.

Eradication of smallpox

The delegation of the USSR submitted to the Assembly a proposal that WHO should embark on a programme aimed at the total eradication of smallpox. Introducing this proposal, the delegate pointed out that the total number of cases of smallpox throughout the world had fallen only very slightly during the past decade. A considerable number of cases were imported every year into countries which had been declared free of the disease, so that the problem was an international as well as a national one. On the other hand, the technique of vaccination was simple and inexpensive, and immunity lasted for several years. Since man was the only reservoir of the virus, it should therefore be possible to achieve eradication of the disease in a relatively short time. This could be done without simultaneous vaccination of the entire population of the world; it would be sufficient to vaccinate periodically in endemic areas. Eradication could then be completed by additional vaccination and effective quarantine. The implementation of such a programme, however, would require a very determined effort on the part of governments and WHO.

The delegations of many other countries warmly supported the proposal made by the USSR; several of them indicated that smallpox had already been eradicated or nearly eradicated in their countries, but there are many areas where it is still a major public health problem. Some doubts were expressed regarding the practicability of achieving world-wide eradication in so short a time as four to five years. The delegate of South Africa pointed out that although vaccination had been carried out in that country for a very long time, it was only recently that smallpox had been eradicated. The delegate of Australia also believed that eradication would not prove as easy as it might appear, since it would require that all countries where the disease is endemic would have to be both willing and able to carry out vaccination systematically, year after year, and co-operate to the fullest extent in international measures.

Some of the difficulties encountered in tropical countries were outlined by the delegate of France. Dried vaccine, although possessing advantages over liquid vaccine, deteriorates rapidly under tropical conditions. Moreover, many of those vaccinated either wiped off the vaccine or exposed it to the sun. There was also the difficulty caused by the constant movement of large sections of the population in certain parts of Africa; at the annual vaccination the same people might appear time after time, while others never appeared at all. The delegate of Switzerland said that, during the past 30 years, two cases of smallpox had been imported into that country, both of which recovered, but during the same period there had been 30 deaths from post-vaccinal encephalitis. It was therefore becoming more and more difficult to impose compulsory vaccination and to maintain the immunization of the population

at a satisfactory level. For this reason the Swiss delegation wished to give its wholehearted support to any effort to eradicate smallpox in countries where it was still endemic.

The Assembly unanimously decided to request the Director-General to study the financial, administrative and technical implications of a programme having as its objective the eradication of smallpox, the study to include the measures to be taken to avoid complications which might result from smallpox vaccination. The Director-General was asked to submit a report on his findings to the Executive Board at its twenty-third session. The Assembly also recommended to all governments that during 1959-1960 the population should be vaccinated in countries in which the principal endemic foci exist, and that during 1961-1962 additional vaccination should be carried out in foci where the disease persists. Subsequently, re-vaccinations should be given to the extent to which the experience acquired in each country shows it to be necessary. It was further recommended that during the period required for eradication, smallpox vaccination should be continued in countries in which it is at present compulsory. Finally, the Assembly called on medical scientists and scientific institutions active in the field of microbiology and epidemiology to increase their efforts to develop a smallpox vaccine resistant to the influence of temperature. The Director-General was asked to report to the Twelfth World Health Assembly on the progress made and the results obtained.

The delegate of the USSR announced that his Government was prepared to release 25 million doses of smallpox vaccine for the campaign, and the Cuban delegation made a formal offer to supply two million doses annually.

Malaria eradication

In opening the discussion on malaria eradication, it was explained on behalf of the Director-General that the programme planned for the period 1958-1962 provided for assistance to 64 countries or territories and for 6 inter-country programmes, covering all areas where the eradication of malaria is technically and economically feasible. Studies are also being made of methods that might enable the programme to be extended to other areas, and provision has been made for field research on problems closely connected with eradication, such as nomadism, elusive vectors, and the use of Pinotti's method (administration of chloroquinized or pyrimethaminized salt). The programme covered nearly 70% of the 1105 million persons living in malarious areas. If all went well it was estimated that, by the end of 1962, it should be possible either to declare eradication achieved or at least to cease large-scale spraying operations in Europe, the Americas, Egypt, Tunisia, Libya, the southern part of Africa, and a large part of Asia.

The entire programme, it was explained, had been based on the assumption that the Malaria Eradication Special Account would be used to supplement, and not to replace, funds earmarked for the purpose in the WHO regular budget or under the Expanded Programme of Technical Assistance. Account had also been taken of the part played by UNICEF and the very considerable aid received by Member States under bilateral agreements. The funds at present in the Special Account would be sufficient for the 1958 programme, and as far as could be foreseen at present, it seemed likely that a further amount of just over $32 million dollars would be received. This would leave about $15 million dollars still to be found.

The Director-General announced the receipt from the Government of the USSR of a formal offer of 1000 tons of DDT for the Malaria Eradication Special Account. In addition to the $5 000 000 already given by the USA, contributions of $47 600 from the Federal Republic of Germany, $5000 from Israel, and $9180 from Turkey were promised.

The delegate of Belgium stressed the importance of guarding against the reinfestation of areas that had been cleared of malaria. He also asked about recent experiments on the use of a 4-aminoquinoline in association with an 8-aminoquinoline for prophylaxis.

In reply to these points, it was stated that measures to prevent the reinfestation of cleared areas were being considered by the Expert Committee on Malaria and by the Committee on International Quarantine; for the treatment of suspected cases of malaria WHO had been mainly recommending a single dose of chloroquine or pyrimethamine, but not a mixture of the kind referred to by the Belgian delegate. It was suggested by the delegate of Costa Rica that a team of investigators should be sent into areas that had been cleared to certify that eradication was complete. The Mexican delegate said that a system of dual evaluation had been found very valuable in his country; one evaluation team worked as part of the campaign, making periodic assessments of progress, and a second team, without personal interest in the campaign, made an independent assessment.

The Assembly expressed satisfaction at the progress of the world-wide malaria eradication campaign and urged all governments concerned which had not yet started programmes of eradication to do so as soon as technically feasible. It thanked those donors whose contributions had enabled the eradication programme to get under way, and requested the Executive Board and the Director-General energetically to pursue concentrated efforts to obtain funds for the Malaria Eradication Special Account from all possible sources.

Atomic energy and health

A question that was very much to the fore in the discussions of the Assembly was the responsibility of WHO in regard to the health hazards arising from the peaceful uses of atomic energy and from ionizing radiations in general. In this connexion, the Assembly heard with interest a statement by a representative of the International Atomic Energy Agency (IAEA), which has been set up " to seek to accelerate and enlarge the contribution of atomic energy to peace, health and prosperity throughout the world ". He said the first task of the Agency was to give assistance to members in the training of specialists in the various fields of atomic energy, and two hundred fellowships are being provided for this purpose. Secondly the Agency intends to work out measures for the protection of health and safety, and methods for the disposal of radioactive waste, as well as to draft regulations for the transport of radioactive materials. It was also proposed to set up one or more groups of experts, including specialists in medicine, to visit countries on request and give advice on the application of radioisotopes. The Agency might also assist in the purchase of radioisotopes, the creation of national laboratories and in obtaining the necessary equipment. The IAEA representative stressed the need for close co-operation with WHO and other organizations working in the same field, and said co-ordination was essential if duplication of effort was to be avoided.

The delegate of Norway stated that his Government was very anxious that WHO should conclude an agreement with the International Atomic Energy Agency as soon as possible. The Director-General replied that he had already been authorized by the Executive Board to negotiate such an agreement, but he referred to a number of practical difficulties in delimiting the responsibilities of the two organizations.

The delegate of Spain thought that WHO had two main functions in regard to atomic energy: the training of technical and medical staff, and public health measures to ensure protection against radiation. Two reports bearing on these questions and published recently in the United Kingdom of Great Britain and Northern Ireland were referred to by delegates from that country. The first was prepared by a special committee appointed by the Prime Minister and dealt with the organization for control of health and safety in the United Kingdom Atomic Energy Authority. It was pointed out that there was an acute shortage of personnel possessing the necessary qualifications for the wide variety of duties they were called upon to perform in such an organization. It would be necessary to build up a new type of industrial medical service, whose officers should have a course of up to six

to nine months in radiation physics, as well as training in radiobiological work. A total of eighteen months full-time study would be required and this might justify a new professional qualification. In addition there was an urgent need for a full understanding of radiological hazards amongst medical officers of health and their senior medical staff; industrial nurses and health visitors should also be given basic instruction.

A second report had been published by the Medical Research Council. This indicated that one of the main health hazards arose from the extensive use of ionizing radiations in diagnostic radiology, and that fall-out from explosions was of much less significance. This was in line with a statement made by the New Zealand delegate, who outlined some of the precautions taken in his country to protect users of X-rays and radioactive substances. All users of radioactive substances were licensed and all persons working with ionizing radiations wore films which were analyzed regularly. According to regulations drawn up by the Radiological Advisory Council, no person should be exposed to more than the maximum permissible dosage and the licence holder is held responsible for any ill effects if the protective regulations are not observed. A widespread educational programme was carried out among all users of diagnostic X-rays. By such means as added filtration, the use of higher voltages, and faster films, it had been possible to reduce the dosage received by patients, in some cases to about one-twentieth of the original dose. Over the past seven years a gradual reduction had been achieved in the amount of radiation received by workers in this field, and the amount was now remarkably low.

The delegate of the USSR outlined a proposal that WHO should take the initiative in organizing systematic research into the accumulation of radioactive substances in the air, the water, the soil, and in foodstuffs of vegetable and animal origin. He referred to the various sources of ionizing radiation to which man is exposed, and in particular to the problem of the disposal of radioactive waste. The question of somatic effects, and more particularly of the genetic effects of small doses of ionizing radiation, merited special attention, he said. WHO had taken the first serious step by convening a group of outstanding scientists to study the effects of radiation on human heredity,[4] and the work so successfully begun should be continued internationally and on a broader scale. The proposals of the Soviet Union were sponsored by the governments of 22 other Member States and, after clarification of certain points, were adopted unanimously by the Assembly. It was decided that early attention should be given to the following questions:

(*a*) methods for the reporting of radiation exposure of individuals;

(*b*) research design for determining the relationship between radiation dosage and congenital defects;

(*c*) methods for the notification to public health administrations of congenital defects which could be due to radiation.

The Director-General was requested to prepare a programme of concrete measures in the field of health aspects of the peaceful uses of atomic energy with the object, *inter alia*, of making an early report on these questions. In the light of the concern of governments about duplication and overlapping, he was also asked to expedite negotiations with IAEA with a view to submitting to the Twelfth World Health Assembly a draft agreement on co-operation between the two organizations in fields of mutual interest. The Assembly further invited the Director-General to initiate consultations for the purpose of organizing, in the very near future, assistance to underdeveloped countries in the matter of the use of radioactive isotopes in medicine; to study the effect of radiation on human heredity; and to recommend measures to be taken for studying the relationship between radiation in health, for research on the treatment of diseases attributable to radiation,

[4] *Effect of Radiation on Human Heredity: Report of a Study Group convened by WHO together with Papers presented by Various Members of the Group.* Geneva, 1957; see also *Chron. Wld Hlth Org.*, 1957, **11**, 237 & 264.

and for establishing, on a scientific basis, hygienic standards for radiation exposure.

Sports medicine

The proposal that sports medicine should be included in the programme of WHO had been submitted by Denmark, Finland, Norway and Sweden to the twenty-first session of the Executive Board, which had requested the Director-General to prepare a preliminary report on this question for the consideration of the Eleventh World Health Assembly. In response to this request, the Director-General had collected information from various sources and had presented a report dealing with the effects of sports on health, medical supervision of sportsmen, and sports medicine as a medical specialty. The report also contained suggestions on practical problems which deserved further study. The discussion of the report was coloured by the differences in the importance attached to sports and to sports medicine in the various countries. There were also some divergences of opinion as to the scope of sports medicine. The delegate of the Netherlands said that, although he recognized the importance of sports medicine, he felt that there were at present too many more important problems facing the Organization, and this opinion was shared by a number of other delegations. Nevertheless, there was general support for the suggestion that there were certain questions deserving further research. The Assembly therefore requested the Director-General to continue, in collaboration with the International Federation of Sports Medicine, his study on the nature of a programme on sports medicine, paying special regard to physical exercise and training as a constituent of a constructive health programme.

OTHER BUSINESS OF THE ASSEMBLY

First Report on the World Health Situation

The Ninth World Health Assembly had requested the Director-General to prepare for the Eleventh World Health Assembly a First Report on the World Health Situation, summarizing the reports submitted by Member States. On behalf of the Director-General, it was stated that practically all Member States had provided specific information, so that the report contained 157 reviews of countries or territories, covering approximately 76% of the world population. It represented a new approach to world health, attempting to give a picture of health throughout the world as reported by the nations themselves in relation to their social and economic development. The first seven chapters were devoted to a rather detailed consideration of various factors influencing public health, the ways in which the health services developed, and the trends of future development in health services. A large part of the report was taken up by the reviews of individual countries. Many delegates expressed their satisfaction with the report. At the same time, attention was frequently drawn to inaccuracies in the reviews of individual countries, and in the course of a lengthy discussion, the opinion was widely held that ample time should be allowed for revision of these sections of the report before it is published. The Assembly therefore requested Member governments to submit before the 1 October 1958 all amendments they wish to include in the report. It also invited them to supply material for a second report covering the period 1957 to 1960, to be submitted by the Director-General to the Fifteenth World Health Assembly.

Study to plan an intensified research programme

The Assembly also discussed the United States proposal, already announced at the Tenth Anniversary Commemorative Session, that WHO should undertake a study for developing a programme of extended activity in medical and scientific research. For this study the United States had declared its willingness to make a special grant of $300 000. There was general appreciation of the United States initiative, but some delegates appeared a little uncertain regarding its precise implications. In answer to questions

raised, the United States delegate explained that the proposal was for a study only, in the first place, and there was no suggestion that WHO should embark on a large grant programme. Nor was the proposal limited to any disease or group of diseases; it called for a study of research needs and resources to determine where international assistance was most urgently required.

The Assembly requested the Director-General to organize and arrange for a special study of the role of WHO in research and of ways in which the Organization might assist more adequately in stimulating and co-ordinating research and developing research personnel. A plan prepared on the basis of this study is to be submitted to the twenty-third session of the Executive Board and to the Twelfth World Health Assembly.

Elections to the Executive Board

The following six States were elected as Members entitled to designate a person to serve on the Executive Board: Brazil, France, Guatemala, Iran, Union of Soviet Socialist Republics, Viet-Nam.

As a result of the establishment of the United Arab Republic, one seat on the Executive Board had become vacant. The Assembly agreed that the United Arab Republic should assume the term of two years remaining to Egypt, and elected Tunisia to replace Syria for the remaining one year of its term of office.

Voting on the Budget

After a lengthy debate, the Assembly decided to amend the rules of procedure so that in future the adoption of the effective working budget would be included among the important questions to be decided by a two-thirds majority.

Award of the Léon Bernard Foundation Prize

The Assembly awarded the Léon Bernard Foundation Medal and Prize for 1958 to Dr Thomas Parran, USA. A description of the ceremony will be found below.

Place of the Twelfth World Health Assembly

The Twelfth World Assembly will be held next year in Geneva, Switzerland.

LÉON BERNARD FOUNDATION AWARD

The Eleventh World Health Assembly awarded the Léon Bernard Foundation Medal and Prize of 1958 to Dr Thomas Parran, Dean of the Graduate School of Public Health of the University of Pittsburgh, USA, in recognition of his outstanding contribution and practical achievements in social medicine. Dr Parran is the eighth recipient of this honour since it was established in 1934 by the Health Committee of the League of Nations, and the third American to be thus distinguished.

The President of the Assembly, Dr Leroy E. Burney, in presenting the Prize, recalled the main steps of Dr Parran's career:

Born in Maryland in 1892, Dr Parran graduated with honours in 1915 from the College of Medicine of Georgetown University, at the same time receiving the degree of Master of Arts from St John's College, Annapolis. After just 20 years of distinguished service, in 14 states of the Union, in public-health research and administrative assignments, including a period as Commissioner of Health for the State of New York, he was appointed Surgeon General of the US Public Health Service on three successive occasions, holding this post from 1936 until 1948. During this period under Dr Parran's leadership, the Service took on a number of highly important new functions which contributed greatly to the advancement of public health in the USA. Among them were the development and expansion of national control programmes against venereal diseases, tuberculosis, and cancer; provision of grants-in-aid to the states of the Union for these and other public health purposes; and a large-scale programme of grants for hospital construction. The research programme of

the Public Health Service was significantly strengthened by means of increased financial grants to research institutions and by the creation of the National Cancer Institution and the National Institute of Mental Health. A Communicable Disease Center was established at Federal level to co-operate with the states in the study and prevention of communicable diseases. To meet the domestic health problems resulting from the Second World War, this service, under Dr Parran's direction, undertook emergency activities, including the wartime health and sanitation programme of assistance to state and local health authorities in especially affected areas. Anticipating the action of the World Health Organization on a global level by many years, Dr Parran transmuted malaria-control activities in the USA into eradication, and out of this initiative grew the Communicable Disease Center already referred to, which is at present carrying out important health work on a broad front. During the latter part of his administration as Surgeon General, the Clinical Center at the National Institutes of Health was planned and its construction was begun. These developments, together with others too numerous to mention, brought the Public Health Service of the United States Government into increasingly close relations with the health departments of the 48 states of the Union, as well as those of United States territories abroad, and in particular gained for it a place of leadership in the world scene.

Under Dr Parran's present direction the Graduate School of Public Health of the University of Pittsburgh has developed into an outstanding educational and research centre in the field of public health. Its influence is felt throughout the Country and, by the training provided to students from abroad, widely throughout the world. Dr Parran has also played a prominent part in the establishment of the World Health Organization. He was a member of the Technical Preparatory Committee, which utilized his draft proposal as a basis for the Constitution of WHO. He was Chairman of the United States delegation to the International Health Conference in 1946, and was elected its President; he served as United States member of the Interim Commission of WHO; and in 1948 was Chairman of the United States delegation to the First World Health Assembly. Before this, Dr Parran had travelled extensively to examine and advise on UNICEF activities; his recommendations contributed greatly to the effectiveness of the joint programmes of UNICEF and WHO, particularly in the field of maternal and child health. Even today Dr Parran's interest in the work of WHO and the international health effort has not diminished. As President, and subsequently as Treasurer, of the National Citizens' Committee in the USA for WHO, and as a member of its Board of Directors, he has continued to give his active support through unofficial channels to international co-operation in health.

Through these achievements and many others, Dr Parran has earned an outstanding reputation throughout the world in the field of social medicine.

In accepting the award, which he felt to be a signal honour, Dr Parran referred to the debt he owed to his earliest contact with the Health Section of the League of Nations—a lifelong inspiration which he had found the opportunity to express many years later in the address he gave at the signing of the WHO Constitution, when describing what he felt should be the goals of international co-operation in the field of health. Dr Parran continued:

These goals set for the World Health Organization represented the highest aspirations of the human spirit. Few of us believed that they could be reached fully and in a short time-span; but we should never lose sight of them. It is a source of great satisfaction that we have moved " Ten Steps Forward "—in fact, we probably might say ten times ten—since this Organization was started. That such substantial progress has been made is all the more remarkable when we consider the continued unsettled conditions in world affairs during these past twelve years. For what has been accomplished, . . . great credit is due to the leadership given by Dr Chisholm and by Dr Candau. Credit also goes to the staff in Geneva and the regional offices, and especially in the field, as well as to the delegates to these several Health Assemblies and the work of the Executive Board.

From the outset, education and training have played an important role—the 8000 WHO fellowships attest to this—and the more recent concern of the United Nations and WHO with atomic energy in relation to health recognizes the importance of this new factor in man's environment . . .

Viewing the sciences in historic perspective, one can detect periodicity. There have been periods of fusion and of the reverse—a disintegration of effort. In the earliest period the natural philosophers were the universal scientists, exploring all of life in order to gain a greater understanding of its meaning. (And in the future as in the past, I am sure that philosophers will contribute to our understanding of life, of natural laws and of the universe.) In due course, it became possible to study one or another aspect of life and living creatures. This led to specialization, which burgeoned in medical research and medical teaching until the specialist came to be known as the person who knows more and more about less and less. There are signs now that this trend is being reversed

—that a scientist needs to have more than one skill under one skull—and that through a fused spectrum of scientific knowledge future progress lies. This trend, apparent in medical and public health education and practice as well, is to see man and his environment as a whole, and especially to interpret the dynamic interrelations in these man-environmental interactions; in short, human ecology.

During recent years the earlier distinction between public health and medicine has started to become blurred; blurred also is that between physical and biological science, so that at present there is no boundary within the biological sciences across which the physical sciences may not usefully pass. In this process of infiltration, there is a resulting integration of all biological sciences into a continuous and more meaningful whole. The viruses are a case in point. They are inert chemicals under certain circumstances; under other circumstances they are reproducing organisms with emergingly-known genetic behaviour, and disease agents of grave importance. Who has jurisdiction here ? Is it the physical scientist, the biologist, or the physician ? Clearly, we need to submerge the old distinctions and preserve the interrelatedness and wholeness of nature.

There has been a long transition from the ritual of the primitive medicine-man to today's medicine of the sciences. The expansion of medical knowledge and teaching in recent years has been dominated by the scientific discipline of medicine itself and by segments of knowledge drawn from other sciences as well, so that today biological and natural sciences have become the very matrix of medical thought. Physics, chemistry and biology indeed are its language and tools.

The past century has been called the era of the biological and the physical scientist, but today we may be entering the century of the psychological man, or more properly of the psychological-sociological-anthropological man. Perhaps the next century will view the first half of this one as the period in which society moved away from its preoccupation with man solely as an economic creature.

Public health has been termed " an applied technology resting upon the joint pillars of natural science and social science ". During the past century the natural-science pillar has been greatly strengthened, but until both the pillars are strong the arch of public health will not be firm. Consideration is being given to the social aspect of the environment, therefore, especially as it interacts with the biological and physical stresses. But since stress effects are both psychological and physiological, emphasis must be given to a fuller understanding of the psychological factors in stress and disease reactions.

My colleague, Dr Robert E. Olson, has drawn attention to the problems facing public health, saying: " The biochemist who studies the kinetics of a purified enzyme system has only a few variables to control; the physiologist who studies the metabolism of an intact organ in an animal has many more to consider; the physician who studies a disease process in an intact human animal has even more parameters to correlate and attempt to control in the diagnosis and treatment of his patient. But the public health scientist who is studying the behaviour of populations is dealing with an infinitely complex situation, to which, in many instances, only statistical solutions are possible."

Let us recall that, in the past, certain factors known to affect public health adversely could be engineered out of the physical environment. Today, there is need of a revealing analysis of the social environment which blocks the way to abundant public health. Most of the degenerative diseases, which constitute our major health problems, have psychosocial components. The so-called psychosomatic diseases such as hypertension, peptic ulcer, rheumatoid arthritis and schizophrenia have direct psychiatric determinants; others such as obesity, alcoholism and coronary artery disease have at least indirect relations with socio-cultural patterns of diet, anxiety reduction or stress.

Public health needs to be increasingly concerned, both in research and teaching, with a comprehensive ecological approach to problems of disease and of health if we are to be successful in understanding better the degenerative diseases—and mental illnesses particularly. The clinician must expand his horizon to include the role of the family and the community in relation to the disease problem at hand.

By the same token, the public health scientist must not be content solely with statistical solutions and epidemiological inferences in his analysis of these knotty problems. The meeting-ground lies in the interdisciplinary teamwork of a group from many fields of science, in sympathetic agreement with each other, and with access to the experimental laboratory, the patient, the family, and the community, as needs be, in pursuit of the problem under study.

We may, by the epidemiological method, when it is paralleled by biochemical studies, identify disease-prone individuals in a population before they become sick . . . Once this is achieved, it may be possible to control certain internal factors as well as external environments, and thus retard the progression of a disease; almost certainly, there are such psychosocial and nutritional factors. Such knowledge may be to the prevention of the degenerative diseases what immunization and good sanitary engineering have been to the prevention of communicable diseases.

It is agreed that the behavioural and the biological or biochemical aspects of man are not separated

by an impassable gulf. But in our preoccupation with newer and complex problems, public health workers must continue their emphasis upon traditional bases for action. We need also to apply to the solution of these newer problems the principles that we have learned from the past.

As one looks back, man has been concerned over the centuries with getting enough food to meet his metabolic needs and with controlling his microbiological environment. Neither objective as yet is met for most of the world's people, and the continued growth of population—estimated at about 1.6% per year—may continue to outrun increased food production. Consequently, public health must be concerned with problems of natality as well as of mortality.

The economy of scarcity has been superseded by one of abundance in this and other Western nations. Hence, we are concerned here with metabolic disorders—obesity, alcoholism, effects of smoking, all of which are disorders of excess rather than deficiency. Even the concept of stress as a cause of mental ill health connotes excess—the impact of more challenges than the organism is able to bear. Sir Geoffrey Vickers has recently said: "Our hazards from excess range from excessive nuclear radiation through excessive smoking to the excessive consumption of ice cream—products which have in common the fact that our superabundance is of our own desiring".

Each new break-through of a discovery in the health sciences and each shift in living patterns will produce additional tasks for WHO and for the national health services. Certainly, we are agreed that additional responsibilities have already been produced by urbanization, by industrialization, by the major threats arising from air pollution, and even from the density of automobiles on the highways. Yet none of these serious problems as yet has been solved.

Added to the familiar environmental hazards is a new factor—namely, nuclear fission, and its use for the production of power. The known supply of fossil fuels is inadequate to meet the power needs of the future and, in the absence of practical methods for harnessing solar energy or unravelling the secrets of photosynthesis, nuclear power is being developed on a huge scale. This will increase at an ever-accelerating pace, with many nations getting into the act but having too little comprehension of the dangers involved. The disposal of "radioactive garbage" poses a whole series of enigmas not yet solved even by the nations most technically advanced. Such problems will confront us increasingly. We must develop the organization, the personnel and —most important of all—acquire the knowledge with which to cope with these problems.

Radiation biology now offers many new fields for research and for the training of individuals to deal with them. Our own Graduate School of Public Health at Pittsburgh is pioneering in such a programme of research and training of new types of specialists who will combine the knowledge of the traditional health sciences with the newer knowledge of nuclear technology. This expanded area of health training, we think, will be invaluable in maintaining the health of man as we enter nuclear competition.

While never losing sight of its long-range goals, WHO in every situation must start any programme on the basis of what now exists in any country or region; each step forward must be practical in the light of the limitations imposed by current traditions, customs and resources.

It is gratifying to note the trend in many countries to seek WHO's help in working out long-term plans for the continuing development of their own health services, and the growing willingness of countries to engage in joint action with their neighbours in solving common problems.

In the Director-General's Report for 1955, the importance of strengthening the national health services was stressed . . . At that time he said that there was a tendency for the nations increasingly to seek help mainly in three directions: (1) supplies to be used in the world-wide struggle against communicable disease; (2) the strengthening of services already established; and (3) the raising of standards of education and training of all types of workers.

Even more attention needs to be given by WHO and every Member State to the collection of more accurate and more comparable health statistics. Without them the course of public health cannot be charted wisely.

I have referred to the world-wide population explosion and the need for health agencies at all levels to be concerned about it, to seek better to understand these complex phenomena and, within their religious and cultural contexts, to devise programmes of research, education and action to deal more successfully with them.

There are two great drains upon the resources, the manpower and the accumulation of capital in most countries which detract from human health and well-being. One is this population increase, which requires increased expenditure for food, clothing, housing and other items of what normal living requires for the too-rapidly increasing population; the other is expenditure to provide for war or the prevention of war—defence. What a different world we could have if some of these expenditures could be diverted to the better cultivation and development of our human capital, the human resources in each country! Health, education, recreation, nutrition are obvious needs. Should not most of these possible savings be diverted to programmes in each country

to improve their own standards of health and well-being, some funds being made available to WHO and other international agencies? Specifically, I would propose that all Member States of WHO, in addition to their regular contributions, take 2‰, just two cents out of every dollar each year, from their annual appropriations for military purposes and use it as an extra contribution to the Expanded Programme of Technical Assistance of the United Nations, in which WHO should have a substantial share.

With such funds, and the sentiment behind them, malaria eradication would be speeded up; smallpox, tuberculosis, syphilis and yaws would be next on the list to go. In fact, all the ancient plagues could be conquered within a measurable number of decades, and then WHO could turn its energies more fully to improving nutrition, to promoting physical and mental vigour, to expanding scientific health knowledge, and finally to the most difficult task of all—the improved harmony of human relations.

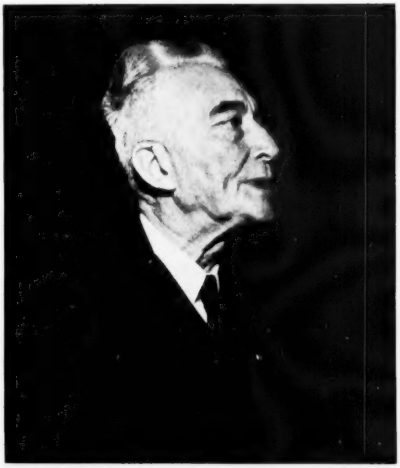
Dr LEROY E. BURNEY

President of the Eleventh World Health Assembly

Dr Leroy E. Burney was born in Burney, Indiana, in 1906, and studied medicine at Butler University, Indianapolis, and at the University of Indiana, where he obtained his doctorate in 1930. Two years later he earned a Master of Science degree in public health from the Johns Hopkins University School of Hygiene and Public Health. He then entered the United States Public Health Service, and during the years 1937-39 he established the first mobile venereal disease clinic service in Brunswick, Georgia. In 1943 he was appointed Assistant Chief of the Division of States Relations, Washington, and from 1945 to 1954 he served as Health Commissioner and Secretary of the Indiana State Board of Public Health. For the next two years he held the post of Assistant Surgeon General and Deputy Chief of the Bureau of States Service. In 1956 he was promoted to Surgeon General of the Public Health Service of the United States Department of Health, Education and Welfare, the appointment he holds at present.

As a member of the Directing Council of the Pan American Sanitary Bureau, which acts as the WHO Regional Committee for the Americas, Dr Burney has for some time been closely connected with the work of the Organization. He was the chief delegate of the United States to the World Health Assemblies of 1957 and 1958.

CHAIRMAN OF THE TECHNICAL PREPARATORY COMMITTEE, AND PRESIDENTS OF THE INTERNATIONAL HEALTH CONFERENCE AND THE FIRST TEN WORLD HEALTH ASSEMBLIES

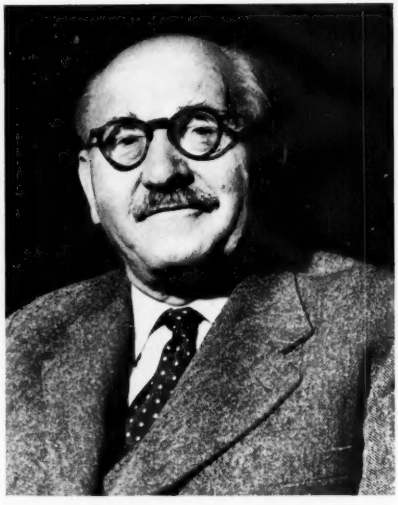


" But while all governments have accepted the principle of social medicine, so far it has not taken its due place in teaching, or in research, or in practice. The clinic and the laboratory continue to monopolize the attention of students, and medical or surgical therapeutics that of the practitioner. Neither students nor practitioners fully realize that, as Hippocrates already said long ago, in medicine the function of protecting and developing health must rank even above that of restoring it when it is impaired. "

Professor René Sand, Belgium: Chairman of the Technical Preparatory Committee, Paris, 1946

" In our Magna Carta for health, we have ventured to declare that we have a contribution to make to the central world problem of today, which is to help man to live harmoniously with his fellow man . . . The World Health Organization . . . is a collective instrument which will promote physical and mental vigour, expand scientific knowledge, and contribute to the harmony of human relations. In short, it is a powerful instrument forged for peace."

Dr Thomas Parran, United States of America: President of the International Health Conference, New York, 1946



" There . . . looms ahead another task for the World Health Organization—to contribute to the development of a new type of physician and specialized health worker, the type who will devote his services to those with impaired health, at the same time realizing that this is only part of the duties and work of the modern public-health doctor. The aim should be to contribute fully to the accomplishment of health for everybody, in the widest sense of that word. "

Professor Andrija Štampar, Yugoslavia: President of the First World Health Assembly, 1948; previously Chairman of the Interim Commission, 1946-1948

" We . . . have developed beyond the primitive stage . . . where sharp distinction was made between physical and mental health. We now know that without mental health there exists no physical health and vice versa *. . . Therefore, to my mind, it is a special encouragement that WHO in its programmes specifically includes mental health as a separate and important item. "*

Dr Karl Evang, Norway: President of the Second World Health Assembly, 1949

" More than half the people of the world live in areas where modern health services with reasonable standards of efficiency are non-existent and the work of the World Health Organization will make its impress on the world health problem only by promoting, through all possible means, the provision of adequate health protection to these peoples. "

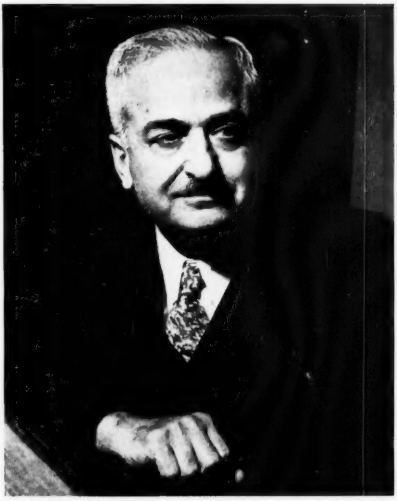
Rajkumari Amrit Kaur, India: President of the Third World Health Assembly, 1950

" Much evidence is available that retarded economic development is largely due to the prevalence of preventable diseases in many parts of the world. The direct road to betterment of living conditions is therefore through action in the health fields . . . "

Dr Leonard Scheele, United States of America: President of the Fourth World Health Assembly, 1951

" There has been too frequent use of the word 'wonder' which, in view of the still experimental nature of some of these products, may be misleading. The consequent effect on public opinion and public health by hasty and even indiscriminate publicity is obviously harmful to populations throughout the world. As a result, inadequate treatment is being attempted, symptoms are masked, resistance is created to future measures and the basic factors of disease control become ignored by the public, gullible—or desperate—enough to want a speedy cure. Such a situation is obviously contrary to the public interest, and it is my wish to draw the attention of the Fifth World Health Assembly to this increasingly serious matter. "

Dr. J. Salcedo, Philippines: President of the Fifth World Health Assembly, 1952



" The World Health Organization has given to the world a great lesson in humanity and altruism and challenged that individualism which has engendered nothing but suffering . . . All we who respond to the appeal are ready to engage in the fight against evil, returning always to the old adage of a healthy mind in a healthy body. "

Dr M. Khater, Syria: President of the Sixth World Health Assembly, 1953

" By actually demonstrating how new discoveries in modern medicine can be and are put to the service of man wherever he lives, we shall give the most forceful encouragement to those whose responsibility it is to decide whether the new forms of energy will spell the doom of mankind, or whether they will open up an era of prosperity, security, and peace unparalleled in history. "

Dr J. N. Togba, Liberia: President of the Seventh World Health Assembly, 1954

" The enthusiastic welcome which the world has accorded the principles set forth in the Constitution of the World Health Organization is evidence of the universality of its aims and of the urgent need that was felt for . . . an organization that would undertake . . . the advance of medical knowledge and the improvement of health throughout the world. Such an effort leads to better understanding among peoples . . . and, above all, affirms the principle that public health knows no frontiers. "

Dr Morones Prieto, Mexico: President of the Eighth World Health Assembly, 1955

" If health is to be made accessible to man both at the national and at the personal level, governments and peoples must unite their efforts. Moreover, if health is to be protected, merely defensive measures are no longer enough; an offensive on a world-wide scale must be launched not only against the diseases of the body but also against those of the mind and against those sources of conflict bred by social inequality. "

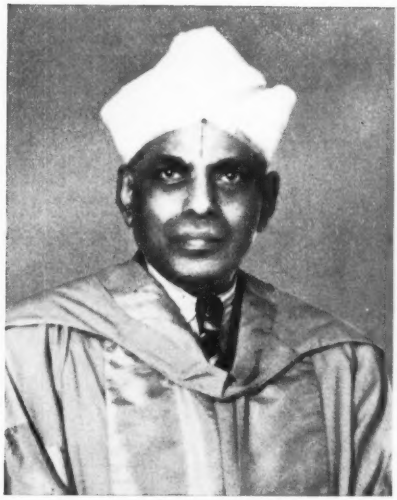
Professor J. Parisot, France: President of the Ninth World Health Assembly, 1956; Chairman of the eighth and ninth sessions of the Executive Board

" The World Health Organization has learnt, year by year, how to profit from its hard-won experience and how continually to adapt its policies and programmes to meet the evolving needs of its Member countries. After nine years of work, our Organization may justly claim that it is now equipped to carry out with maximum efficiency any tasks, however arduous and however delicate, that it may be called upon to perform. "

Dr S. Al-Wahbi, Iraq: President of the Tenth World Health Assembly, 1957; Chairman of the sixteenth and seventeenth sessions of the Executive Board

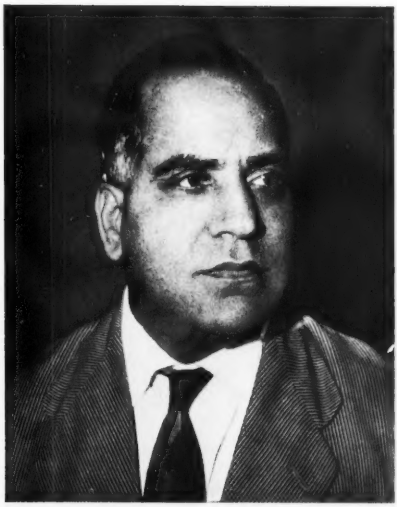
CHAIRMEN OF THE EXECUTIVE BOARD

Dr A. T Shousha: first, second and third sessions, 1948-1949



Sir Arcot Mudaliar: fourth and fifth sessions, 1949-1950

Dr H. S. Gear: sixth and seventh sessions, 1950-1951



Dr M. Jafar : tenth and eleventh sessions, 1952-1953

Professor J. Parisot, Chairman of the Board at its eighth and ninth sessions, was later President of the World Health Assembly (see opposite page).

Dr Melville Mackenzie: twelfth and thirteenth sessions, 1953-1954

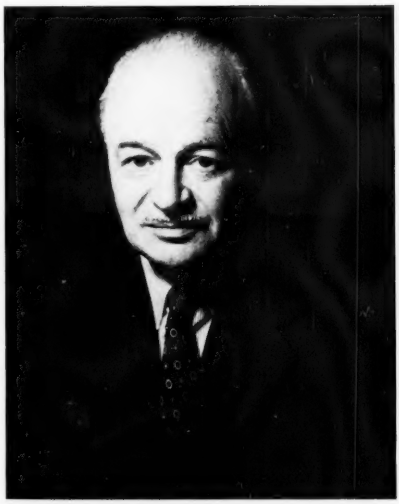
Dr H. van Zile Hyde: fourteenth and fifteenth sessions, 1954-1955

Dr S. Al-Wahbi, Chairman of the Board at its sixteenth and seventeenth sessions, was later President of the World Health Assembly and his photograph appears earlier in this number.

Professor G. A. Canaperia: eighteenth and nineteenth sessions, 1956-1957

Sir John Charles: twentieth and twenty-first sessions, 1957-1958

DIRECTORS-GENERAL OF WHO



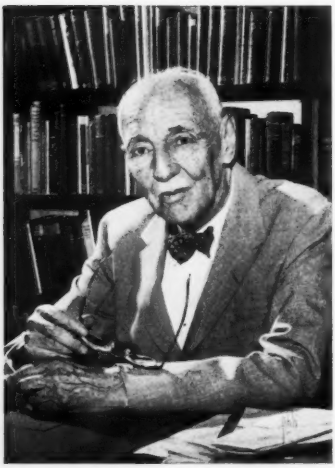
Dr Brock Chisholm, Executive Secretary of the Interim Commission, 1946-1948, and Director-General of the World Health Organization, 1948-1953

Dr M. G. Candau, Director-General since 1953

THE LÉON BERNARD MEDAL AND PRIZE

The medal and prize of the Léon Bernard Foundation, established in memory of Professor Léon Bernard, one of the founders of the Health Organisation of the League of Nations, are awarded periodically for outstanding service in social medicine. The first award was made in 1939 to Dr Wilbur Sawyer. Since 1950 the award has been made by the World Health Assembly.

RECIPIENTS OF THE MEDAL AND PRIZE SINCE 1950



Professor Charles-Edward Amory Winslow (1952)

Dr Johannes Frandsen (1953)

Professor Marcin Kacprzak (1957)

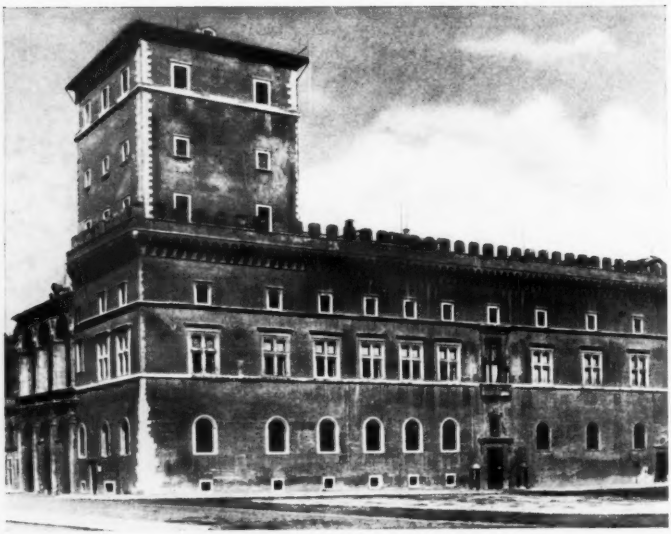
Other recipients, whose photographs appear earlier in this number, have been Professor René Sand (1951); Professor Jacques Parisot (1954); and Professor Andrija Štampar (1955).

HEADQUARTERS OF THE WORLD HEALTH ORGANIZATION

The Palais des Nations, Geneva, where the World Health Organization has its Headquarters and where most sessions of the World Health Assembly and the Executive Board have been held

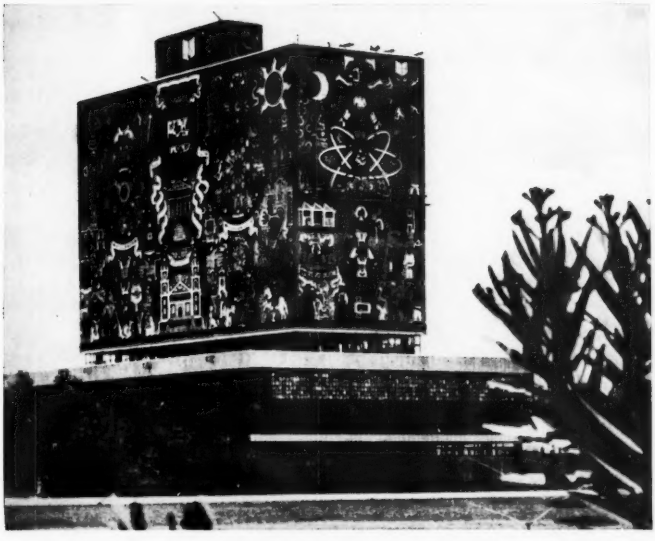
The President of the Third World Health Assembly, Rajkumari Amrit Kaur, lays the foundation stone of the new wing of the Palais des Nations, May 1950.

The World Health Assembly in plenary session in the Assembly Hall, Palais des Nations



The Palazzo Venezia, Rome, where the Second World Health Assembly was held in June-July 1949

A meeting of the Executive Board, in the Council Chamber, Palais des Nations

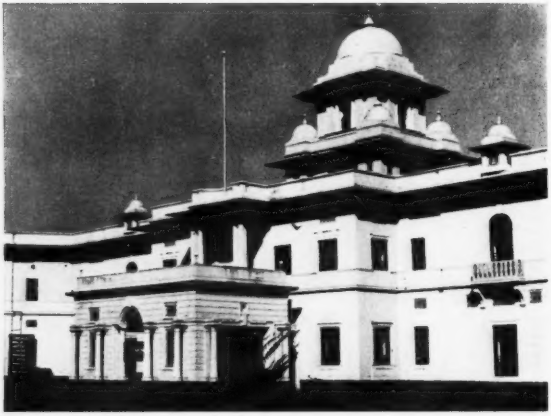


The Library Building, University City, Mexico, D. F., where the Eighth World Health Assembly and the sixteenth session of the Executive Board were held in May 1955

THE REGIONAL OFFICES

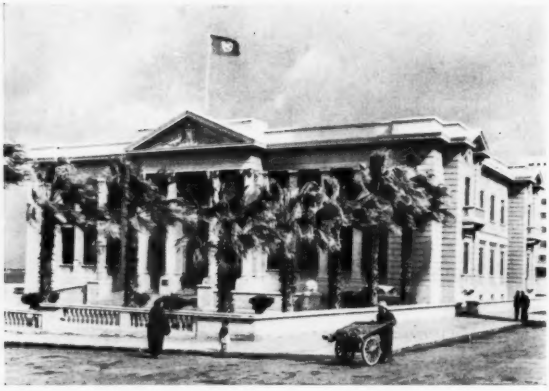
African Region: Brazzaville

Region of the Americas: Washington, D.C. (Pan American Sanitary Bureau/Regional Office of WHO)



South-East Asia Region: New Delhi

European Region: Copenhagen



Eastern Mediterranean Region: Alexandria

Western Pacific Region: Manila

TWENTY-SECOND SESSION OF THE EXECUTIVE BOARD

Immediately after the closure of the Eleventh World Health Assembly,[1] the Executive Board held its twenty-second session on 16 and 17 June 1958, in Minneapolis, USA. At the opening meeting, the Board unanimously elected as Chairman, Dr P. E. Moore, Director of Indian and Northern Health Services, Department of National Health and Welfare, Ottawa (Canada), and as Vice-Chairmen, Dr A. Habernoll, Ministerial Counsellor, Federal Ministry of the Interior, Bonn (Federal Republic of Germany) and Dr C. Díaz-Coller, Director of Experimental Studies in Public Health, Ministry of Health and Welfare, Mexico City (Mexico). Dr M. Slim, Medical Inspector, Tunis (Tunisia) and Dr T. R. Tewari, Deputy Director-General, Health Services, New Delhi (India) were elected as Rapporteurs. The Director-General of WHO, Dr M. G. Candau, acted as Secretary.

The other members of the Board for the present term of office are the following: Dr E. J. Y. Aujaleu (France), Professor G. A. Canaperia (Italy), Sir John Charles, retiring Chairman (United Kingdom), Dr A. R. Hakimi (Afghanistan), Dr H. van Zile Hyde (United States), Dr Le Van Khai (Viet Nam), Dr A. J. Metcalfe (Australia), Mr H. Olivero (Guatemala), Dr H. M. Penido (Brazil), Dr A. H. Radji (India), Dr M. O. Shoib (United Arab Republic), Dr J. N. Togba (Liberia) and Professor V. M. Zhdanov (USSR). The alternates to Sir John Charles, Dr Aujaleu, Dr Radji and Dr Shoib are Dr A. E. W. Rae, Dr L. Bernard, Dr Dia E. El-Chatti and Dr A. Diba, respectively.

Main subjects of discussion

Apart from specific topics of an administrative, financial and organizational nature, the following were the most important subjects considered: smallpox eradication campaign, creation of a consultative committee to advise on negotiations with the International Atomic Energy Agency, programme of technical discussions for coming Assemblies, and approval of expert committee reports.

Smallpox campaign

The Executive Board approved the establishment of a special account to receive gifts of smallpox vaccine and other gifts offered by governments to assist in the smallpox eradication campaign which will be undertaken in accordance with the decisions of the Eleventh World Health Assembly. The first contributions to this account were made by the Governments of the USSR and Cuba, which offered, respectively, 25 million doses of vaccine and an annual contribution of 2 million doses.

Atomic energy

The Board also decided to establish a consultative committee to advise the Director-General in his negotiations with the International Atomic Energy Agency for the purpose of concluding an agreement between WHO and this new specialized agency of the United Nations. The committee will consist of the following members: Dr E. J. Y. Aujaleu, Sir John Charles, Dr H. van Zile Hyde, Dr H. Penido and Dr T. R. Tewari, with Dr P. E. Moore and Dr A. H. Radji as alternates.

Technical discussions

In accordance with the decision taken at the eighteenth session of the Executive Board, the subject selected for the technical discussions which will take place on the occasion of the Twelfth World Health Assembly, to open on 12 May 1959 at WHO Headquarters in Geneva, is " Health Education of the Public ". The General Chairman of the technical discussions will be Dr Arcot

[1] See p. 224.

Lakshmanswami Mudaliar (India). The subject chosen for the technical discussions at the Thirteenth World Health Assembly, in 1960, is " The role of immunization in communicable disease control ", while it was suggested that the topic of the discussions at the Fourteenth World Health Assembly should be " Mental health programmes in public health planning ".

Reports by WHO expert committees

The Board authorized the publication of the following reports: First Report of the Expert Committee on Medical Rehabilitation; Second Report of the Expert Committee on Training of Health Personnel in Health Education of the Public; Fifth Report of the Expert Committee on Environmental Sanitation: Air Pollution; Eighth Report of the Expert Committee on Insecticides; Fourth Report of the Expert Committee on Professional and Technical Education of Medical and Auxiliary Personnel: Post-graduate Training in the Public Health Aspects of Nuclear Energy; Fifth Report of the Expert Committee on Professional and Technical Education of Medical and Auxiliary Personnel: The Introduction of Radiation Medicine into the Undergraduate Medical Curriculum.

The next session of the Executive Board will be held in Geneva, starting on 20 January, 1959, and will be preceded by a meeting of the Standing Committee on Administration and Finance, which will commence its work on 13 January.

THE WORK OF WHO: 1957

A Review of the Annual Report of the Director-General

The latest Annual Report of the Director-General on the work of the World Health Organization [1] shows that in 1957, as in previous years, the co-ordination and stimulation of research played a leading part in the Organization's programmes for the control of the communicable diseases. A feature of these programmes was the close link between laboratory research and field activities.

An increasing effort was made to achieve the goal of world-wide malaria eradication set by the Eighth World Health Assembly in 1955; in this field, research into anopheles resistance to insecticides received particular attention. Both the research and the epidemiological intelligence aspects of WHO's influenza programme were put to a severe test during the 1957 influenza pandemic. In general, the programme seems to have been adequate for its purposes.

The shortage of trained personnel continued to retard further improvement in health throughout the world, and special emphasis was laid by WHO on training programmes, particularly in the fields of environmental sanitation, and maternal and child health.

During the year, Ghana became a full Member of WHO, while Albania, Bulgaria, Poland, Romania and the USSR resumed active participation in the Organization's work.[2] This resumption made it possible to implement the larger of two alternative programmes approved by the Ninth World Health Assembly for 1957 and also led to a natural expansion of activities in Europe.

The following pages contain a brief survey of the principal activities mentioned in the Report.

[1] World Health Organization (1958) *The work of WHO, 1957 : annual report of the Director-General to the World Health Assembly and to the United Nations* (*Off. Rec. Wld Hlth Org.*, No. 82), Geneva, vii + 183 pages. Price: 6/9, $1.25, or Sw. fr. 4. Published in English, French and Spanish.

[2] Early in January 1958, active participation in the work of the World Health Organization was resumed by Czechoslovakia also.—ED.

MALARIA ERADICATION

By the end of 1957, 76 countries and territories were either carrying out or planning programmes of malaria eradication. During the year there was an increase in the amount of technical advice in this field provided by the Organization, whose technical services were strengthened by the establishment of a new Division of Malaria Eradication. The Organization sponsored several technical meetings on antimalaria activities in the various regions, as well as a number of training courses for antimalaria personnel.

The work of WHO in sponsoring and co-ordinating research on problems relating to malaria eradication was greater than ever before. A WHO advisory and research team continued to study *Anopheles gambiae* resistance to insecticides in various parts of Africa, and the more general use of WHO standardized tests of mosquito susceptibility to insecticides led to the detection of new foci of resistance in a number of countries. WHO-sponsored laboratory research on the induction of resistance in anophelines by exposure of successive generations to insecticides continued, as did research on the rapid sorption of insecticides from the surface of mud walls.[3] A new subject of research sponsored by the Organization in 1957 is the action that some antimalarials appear to have on the development of the mosquito-stages of the malaria parasites, preventing them from reaching the final infective stage.

Towards the end of the year the Malaria Eradication Special Account was substantially increased by a generous donation from the United States of America, with the result that some programmes can now be initiated without delay. More contributions will however be necessary in the next few years if WHO is to carry out the responsibilities in regard to malaria eradication entrusted to it by the Eighth World Health Assembly.[4]

[3] See *Chron. Wld Hlth Org.*, 1957, 11, 371.
[4] See *Chron. Wld Hlth Org.*, 1958, 12, 169.

COMMUNICABLE DISEASES

During 1957, the co-ordination of laboratory and field research was extended to a wider range of epidemiological problems. Epidemiological studies and local surveys are now recognized as an essential preliminary to projects against practically every communicable disease. These surveys ensure realistic planning of control work, and in some cases have led to simpler and more effective methods of control.

Venereal diseases and treponematoses

WHO continued to assist yaws campaigns in Laos, Liberia, Nigeria, Sierra Leone, Thailand and the Caribbean area. In Haiti, the mass campaign was completed and a surveillance system put into operation; in Indonesia, yaws control work was incorporated into the public health services. Periodic resurveys showed that, in areas where mass campaigns were in operation, the prevalence of yaws was greatly reduced and the transmission of the disease had been largely stopped. The campaign against endemic syphilis in Bechuanaland continued, and assistance was given to venereal-disease control campaigns in Ethiopia, Haiti, Iran, Morocco, Spain and Taiwan.

Success in the control of the endemic treponematoses in the rural areas of many countries now makes it practicable to turn to the control of venereal syphilis in the cities. WHO has suggested that a start might be made in Africa, and in 1957 it recommended to governments of the African Region that they collect prevalence data as a preliminary step.

Grave allergic reactions after the administration of penicillin have been reported

in low but increasing prevalence in certain countries, and this development is being closely watched. During 1957, WHO published two monographs on treponematoses.[5]

Tuberculosis

Two tuberculosis survey teams, staffed by WHO and equipped by UNICEF, worked in five African countries and territories during the year, and several other regions are planning to start similar surveys. Data collected during such surveys are proving helpful in the evaluation of various epidemiological and diagnostic problems, and in 1957 combined field and laboratory research was conducted on such questions as non-specific allergy to tuberculin and the relative values of direct microscopy and culture methods in epidemiology. Other tuberculosis research sponsored by WHO included a study to develop laboratory methods that will give reliable indices of the potency of BCG vaccines, and tests to determine the keeping qualities of a freeze-dried glutamate vaccine produced in Japan.[6]

A study group convened by WHO in September agreed that chemotherapy and chemoprophylaxis are important for the community control of tuberculosis, but that field research is needed to establish more clearly the part that each can play.[7] An extended use of chemotherapy in field projects was recommended by the UNICEF/WHO Joint Committee on Health Policy in May 1957. Tests are being made in several pilot projects to determine the drugs or combinations of drugs most suitable for community treatment.

Zoonoses and veterinary public health

The Joint FAO/WHO Expert Committee on Brucellosis met in October to review the progress made since 1952 in brucellosis research co-ordinated by the two organizations; [8] and a WHO/FAO brucellosis centre was established in Tokyo. WHO continued to co-ordinate research on rabies, and grants were made to laboratories in various countries for work on antirabies serum and vaccines.

The preparation of reference antisera for eighteen major types of *Leptospira* was completed in several of the WHO/FAO leptospirosis reference laboratories. For a study of the part played by domestic animals in the epidemiology of human influenza, specimens were collected from swine and horses in 25 countries, before and after the human epidemic, and sent to WHO influenza centres for examination. Studies were also started to assess the significance of the apparently specific antibodies to human poliomyelitis viruses that have been found in cattle and swine, and of numerous viral agents, analogous to the " orphan " viruses in human beings, that are being isolated from domestic animals. Studies of diagnostic procedures for toxoplasmosis were continued.

Collaboration with FAO on milk and meat hygiene continued, and a monograph on meat hygiene was published.[9] A WHO seminar on veterinary public health for countries of the European Region was held in Warsaw in November.[10]

Virus diseases and vaccine studies

In just under three weeks after WHO received the first news of the 1957 influenza pandemic, it was able to inform health authorities and vaccine-producing laboratories that the responsible virus was unrelated to all previously isolated strains and that existing vaccines were unlikely to give protection. This warning enabled several countries to produce appreciable quantities of vaccine before the epidemic reached them.[11]

The WHO Expert Committee on Poliomyelitis met in July to review the results of

[5] Turner, T. B. & Hollander, D. H. (1957) *Biology of the treponematoses*, Geneva (*World Health Organization: Monograph Series*, No. 35); Hackett, C. J. (1957) *An international nomenclature of yaws lesions*, Geneva (*World Health Organization: Monograph Series*, No. 36)

[6] See *Bull. Wld Hlth Org.*, 1957, **17**, 289.

[7] *Wld Hlth Org. techn. Rep. Ser.*, 1957, **141**

[8] *Wld Hlth Org. techn. Rep. Ser.*, 1958, **148**

[9] Albertsen, V. E. et al. (1957) *Meat hygiene*, Geneva (*World Health Organization: Monograph Series*, No. 33)

[10] See *Chron. Wld Hlth Org.*, 1958, **12**, 120.

[11] See also *Chron. Wld Hlth Org.*, 1957, **11**, 269; 1958, **12**, 43.

poliomyelitis vaccination in various countries. Current technical procedures for production and testing were studied, and problems needing further investigation were indicated.[12]

The first steps were taken towards a programme of co-ordinated research on arthropod-borne virus diseases, particularly the group-B encephalitis viruses. Details of a method for preparing a highly stable dried smallpox vaccine were distributed during the year, and assistance was given to a number of countries wishing to start production. Final stages of the controlled trials of this vaccine were completed by the end of the year. Batches of stable dried typhoid vaccines were prepared for use in further field trials and for subsequent consideration as reference standards.

Other communicable diseases

Ghana and the Federation of Rhodesia and Nyasaland started pilot projects for the control of bilharziasis. WHO-sponsored studies on the ecology of the snail intermediate host of bilharziasis continued, and field workers in Africa co-operated in providing collections of snail species which have been sent to the three WHO snail identification centres.

Pilot trials of simple and cheap mass-treatment schedules for the control of communicable eye diseases were continued in Taiwan and started in India, Indonesia and Spain. Co-ordinated research on the virology of trachoma continued.

Further antileprosy projects were undertaken, most of them in co-operation with UNICEF, and progress was made in co-ordinating research on the pathology and epidemiology of leprosy and on the possible value of BCG vaccination in its prevention. Two training courses in the techniques of onchocerciasis control were started in Africa, and research was co-ordinated on lesions of the posterior segment of the eye due to this disease. WHO assistance to India for a programme of field research on sylvatic plague came to an end during the year, while assistance to a similar project in Indonesia was continued.

[12] *Wld Hlth Org. techn. Rep. Ser.*, 1958, 145

PUBLIC HEALTH SERVICES

Public health administration

1957 saw a further development in the planning and organization of decentralized integrated health services in various parts of the world, e.g., Afghanistan, Iraq, and several countries in the Americas. Good progress was made with the United Nations and specialized agencies in co-ordinating international assistance for programmes of social development, and WHO took part in a survey organized by the United Nations on community development in Africa.

Nursing

Assistance continued to basic schools of nursing and midwifery, and to the establishment of programmes of post-basic nursing education. A bibliography of text and reference books for basic and post-basic programmes was revised and widely distributed, and a supplementary bibliography on auxiliary nursing prepared. Other nursing publications prepared by WHO in 1957 were a monograph on nursing administration and a guide for the planning of basic nursing education programmes.

Social and occupational health

The Joint ILO/WHO Committee on Occupational Health met in March 1957; its report [13] deals with the training of physicians in occupational health and the organization of occupational health institutes. With help

[13] *Wld Hlth Org. techn. Rep. Ser.*, 1957, 135

from WHO, a department of occupational health was established during the year at the High Institute of Public Health, Alexandria, Egypt. A regional seminar on the nurse in industry was held in London by WHO, which also co-operated in the organization of seminars on rehabilitation, held in Indonesia and in Paris.

In the field of social health, WHO continued its study of the cost and financing of medical services, which was initiated in 1956 with ILO assistance.

Health education of the public

Health education meetings sponsored by WHO in 1957 included the first African seminar on health education, held at Dakar, French West Africa,[14] and the second European Conference on Health Education, which took place at Wiesbaden, Germany.[15] The WHO Expert Committee on the Training of Health Personnel in Health Education met in Geneva at the end of October. An eight-week training course in health education was held at Noumea, New Caledonia, by WHO and the South Pacific Commission.

During 1957 the Organization, in co-operation with UNESCO, completed a study guide on the training of teachers for health education.

Maternal and child health

Field activities during the year included assistance to the Government of Pakistan for the establishment of a new children's hospital in Karachi. Visiting professors of paediatrics provided by WHO were assigned to the medical schools at the Universities of Kabul and Madras. Short-term consultants were sent to a number of countries to advise on various aspects of maternal and child health. A regional seminar on maternal and child health was held in Cairo in November 1957.

Plans were made for a study of how far the current definition of prematurity is appropriate in different countries, and work was continued, especially in the Region of the Americas, on anaemia in pregnancy and on diarrhoeal diseases of children.

Mental health

WHO study groups on the following mental health problems met during the year: schizophrenia, the mental health aspects of atomic energy, and the use of ataraxic and hallucinogenic drugs in psychiatry. Studies were started on the epidemiology of mental disorder, the mental health effects of technical change, and occupational therapy and rehabilitation techniques in the care of mental patients.

Nutrition

Work on the prevention of protein malnutrition continued, and considerable advances were made in the joint FAO/WHO/UNICEF programme on protein-rich foods. The Joint FAO/WHO Expert Committee on Nutrition met in Rome in October, and its report—which shows how the scope of the nutrition work of the two organizations has widened—will shortly be published. A training course for medical and other personnel concerned with nutritional problems in various territories in Africa was held in Uganda.

Dental health

A WHO Expert Committee on Water Fluoridation was convened in August 1957. Its report[16] expresses the view that the effectiveness, safety and practicability of water fluoridation as a means of preventing dental caries are now established. A study of periodontal disease was made in co-operation with the Indian Council of Research and the US Public Health Service, and WHO participated in a seminar on the subject held in Bombay.

[14] See *Chron. Wld Hlth Org.*, 1957, **11**, 313.

[15] See *Chron. Wld Hlth Org.*, 1957, **11**, 315.

[16] *Wld Hlth Org. techn. Rep. Ser.*, 1958, **146**

Health work among Palestine refugees

WHO continued to assist the United Nations Relief and Works Agency (UNRWA) in the health care of the 950 000 Palestine Arab refugees in Lebanon, Syria, Jordan and Gaza. Special attention was paid during the year to the prevention and cure of gastro-enteritis in infants. The maternal and child health programme was continued, and a nutrition survey was made. Tuberculosis accounted for over 10% of the budget for health care, and there was an increased use of chemotherapy in this connexion.

ENVIRONMENTAL SANITATION

In view of the shortage of supervisory and administrative staff for national sanitation programmes, WHO increased its assistance to educational institutions for courses in sanitary engineering.

In November, the effects of air pollution on human health were discussed by a WHO expert committee, which met in Geneva, and by a WHO regional conference at Milan, Italy.[17] A study of food sanitation problems was undertaken in co-operation with some countries of the European and Eastern Mediterranean Regions; its purpose is to determine standards, procedures and programmes that may be employed by health agencies in practical food control. Work has also begun on a programme for co-ordinated research on standards of drinking-water quality, and on methods of water examination.

The directors of eleven laboratories attended a technical conference on insecticide resistance convened by WHO in July;[18] and the WHO Expert Committee on Insect Resistance and Vector Control met in November. Seven new research projects concerning resistance were started with grants from WHO funds. A monograph on insecticide resistance in arthropods was prepared for publication,[19] and an English translation of studies by Japanese scientists on insecticide resistance was published, with help from WHO.

[17] See *Chron. Wld Hlth Org.*, 1958, **12**, 14.

[18] See *Chron. Wld Hlth Org.*, 1958, **12**, 115.

[19] Brown, A. W. A. (1958) *Insecticide resistance in arthropods*, Geneva (*World Health Organization : Monograph Series*, No. 38)

EDUCATION AND TRAINING

During 1957, emphasis was laid by WHO ob the training of public health workers to meet the new problems facing them as a result of the increasing use of atomic energy (see below). WHO study groups met in Geneva and Manila to consider aspects of the teaching of preventive medicine.

Fellowships for studies abroad in preparation for specific posts in the home country again formed an important part of WHO's educational work. From 1 December 1956 to 30 November 1957, 1086 fellowships were awarded to persons from 112 countries and territories for study in 84 other countries and territories. The Organization also continued to assist medical and public health schools by providing visiting professors; the number of WHO teaching personnel assigned to educational institutions was 113.

ATOMIC ENERGY AND HEALTH

Two WHO expert committees met in 1957 to consider respectively the post-graduate training of public health workers in the public health aspects of nuclear energy, and the introduction of radiation medicine into the undergraduate medical curriculum. An international training course on radiation protection was held at Mol, Belgium, by WHO in association with the United States Atomic Commission and the United States Atomic Energy Commission.[20] WHO fellowships were awarded during the year in different aspects of radiation protection and the medical use of radioisotopes.

Work was started on the formation of an Expert Advisory Panel on Radiation which will assist WHO in matters relating to the health aspects of atomic energy and X-radiation. Co-operation with the United Nations Scientific Committee on the Effects of Atomic Radiation continued, and, in conjunction with FAO and UNESCO, the Organization is preparing background data to assist the Scientific Committee in assessing the probable effects of the disposal of radioactive waste in the oceans. WHO also co-operated with FAO in preparing a paper for the Scientific Committee on calcium components of human diet in various countries. At a conference on the use of radioisotopes in scientific research, called by UNESCO, WHO arranged for evening lectures dealing with radiation in relation to public health and the clinical uses of radioisotopes. WHO was also represented at the General Conference of the new International Atomic Energy Agency, in Vienna.

[20] See *Chron. Wld Hlth Org.*, 1958, **12**, 37.

EPIDEMIOLOGY AND HEALTH STATISTICS

A revised edition of the *Manual of the International Statistical Classification of Diseases, Injuries, and Causes of Death* was published in English, French and Spanish.[21] *Annual Epidemiological and Vital Statistics*, 1954, which also appeared during the year, contains data from more countries than formerly, as well as additional tables and, for the first time, statistics of health personnel, hospital establishments and vaccination. In addition to routine information on vital statistics and communicable diseases, the monthly issues of the *Epidemiological and Vital Statistics Report* published special collections of data on mortality from certain causes.

Further statistical studies were made showing the suitability of the proportional mortality ratio (deaths at ages 50 and over as a percentage of total deaths) as an indicator for the component " health, including demographic conditions " in the measurement of levels of living.[22] Other studies included the computation of tables for use by water analysts, a guide to statistical methodology applicable to antimalaria work, a discussion of the value of various methods for the refinement of the conventional infant-mortality rate,[23] and the establishment of indices of epidemicity.[24]

As requested at the Eighth World Health Assembly, an annotated edition of the International Sanitary Regulations was published in English and French and a Spanish translation was prepared.

[21] See *Chron. Wld Hlth Org.*, 1957, **11**, 374.

[22] *Bull. Wld Hlth Org.*, 1957, **17**, 439

[23] *Bull. Wld Hlth Org.*, 1957, **16**, 763

[24] *Bull. Wld Hlth Org.*, 1957, **16**, 1083

DRUGS AND OTHER THERAPEUTIC SUBSTANCES

The WHO Expert Committee on Biological Standardization approved the establishment of International Standards and defined the International Units for pertussis vaccine, phenoxymethylpenicillin, tetracycline, and erythromycin.[25] A WHO Study Group on Recommended Requirements for Biological Substances suggested a detailed procedure which WHO might follow in framing and issuing international recommendations on requirements to be observed in the manufacture and control of important biological products.

Under an agreement between WHO and the Swedish Apotekarsocietet, a Centre for Authentic Chemical Substances was set up in Stockholm for the collection, storage and distribution of a number of chemical reference preparations. On the recommendation of the WHO Expert Committee on Addiction-Producing Drugs,[26] decisions concerning the addiction-producing properties of seven drugs were transmitted to the Secretary-General of the United Nations.

The Organization continued its selection of recommended international non-proprietary names for pharmaceutical preparations, and work was started on the final text of a Supplement to Volumes I and II of the International Pharmacopoeia. A series of studies on synthetic substances with morphine-like effect was completed, while further information was collected on laboratory methods for the diagnosis of various diseases.

[25] *Wld Hlth Org. techn. Rep. Ser.*, 1958, **147**

[26] *Wld Hlth Org. techn. Rep. Ser.*, 1958, **142**

REGIONAL ACTIVITIES

African Region

WHO's assistance in the African Region was concentrated chiefly on communicable disease control and on surveys and courses in nutrition, although attention was also given to environmental sanitation, nursing and maternal and child health. Work on leprosy, yaws and tuberculosis was extended, and there were important developments in investigations of the technical difficulties involved in malaria control. During the twelve months ending 30 November 1957, 52 projects received assistance from WHO, as compared with 36 in the previous twelve months; 104 fellowships were awarded during the year.

Region of the Americas

An increase in the regular budget and in contributions to the Special Malaria Fund of the Pan American Sanitary Organization resulted in a considerable expansion of PASO/WHO assistance to health work in the Americas during 1957. In the field of communicable disease control, malaria eradication was given priority and progress was made in campaigns for the eradication of smallpox, yaws and the urban vector of yellow fever. Further assistance was given for the strengthening of national public health services and the improvement of environmental sanitation, while advice was provided on the planning, staffing and reorganization of university courses, including those on preventive medicine and for the training of nurses. Particular attention was again paid to the training of statistical workers. Between 1 December 1956 and 30 November 1957, 64 projects received assistance from WHO. There was a great increase in the number of fellowships awarded; 261 as compared with 159 in the preceding period.

South-East Asia Region

The main trend in the programme of the South-East Asia Region in 1957 was towards the integration of individual projects into co-ordinated public health services. Thus much of the Region's work consisted in advising and assisting central and state governments, and in improving supervision and administration. In South-East Asia, 127 projects received WHO assistance during the twelve months ending 30 November 1957 as against 123 in the preceding twelve months. Assistance was given chiefly in the control of communicable diseases, the development of rural health services, and the training of health workers, particularly nurses. During the year, WHO awarded 90 fellowships to candidates from South-East Asia, as compared with 79 in the previous year.

European Region

The WHO programme in Europe is still fundamentally concerned with assistance to education and training, and seminars, conferences, courses and advisory groups were organized on a wide variety of subjects. Long-term studies continued on problems common to countries in the Region and several new studies were initiated in 1957. In co-operation with UNICEF, new programmes were started in Austria and Morocco, respectively, for the care of premature infants and the training of public health personnel, while a programme for gamma globulin production in Poland was revived. In the Technical Assistance project for the control of communicable diseases in Spain, special attention was given to brucellosis. In the twelve months ending 30 November 1957, WHO assisted 69 projects and awarded 420 fellowships in the European Region.

Eastern Mediterranean Region

During 1957, particular attention was paid to communicable disease control. A special malaria eradication unit was established in the Regional Office, while eradication programmes were operating in four countries of the Region, and planned in three others. Both malaria eradication and bilharziasis control were increasingly co-ordinated on a regional scale, particularly between countries with common frontiers. In view of the shortage of health workers of all categories, special emphasis was laid on education and training, and a survey of basic medical education in the Region was planned for 1958. During the twelve months ending 30 November 1957, 155 WHO fellowships were awarded and 88 WHO-assisted projects were in operation in the Eastern Mediterranean Region.

Western Pacific Region

Some advance was made during the year in the long-term planning of rural health programmes, notably in Cambodia, the Philippines and Viet Nam. Programmes for the control of yaws and malaria were steadily expanded, and assistance was given to governments in the strengthening of educational and training facilities. Forty-seven projects in the Western Pacific Region were assisted by WHO during the year ending 30 November 1957, and 56 fellowships were awarded in the same period.

* * *

A complete list of the WHO-assisted projects in operation from 1 December 1956 to 30 November 1957—country projects, inter-country projects and inter-regional projects—is included in the Report.

THE EVOLUTION OF INTERNATIONAL CO-OPERATION IN PUBLIC HEALTH *

The World Health Organization is the most recent step in an international movement for co-operation in public health which began a little more than a century ago. It is fitting in this tenth-anniversary year to look back at WHO's antecedents, to trace briefly the path which led to its establishment, and to recall the earlier organizations and events which did much to pave the way.

The International Sanitary Conferences

In the latter half of the nineteenth century, a number of International Sanitary Conferences were convened. It was an era of great social and scientific progress, and international action on many questions became imperative because of the enormous growth of international intercourse and commerce brought about by developments in transport and communications. The sanitary conferences were prompted by a desire to reconcile commercial and health interests: European governments wished to guard their people against the importation of " exotic diseases "—cholera, plague, and yellow fever, in particular—and, at the same time, to avoid quarantine restrictions which would unnecessarily interfere with maritime trade.

The First International Sanitary Conference opened in Paris in July 1851. Six months of meetings and hard work on the part of participants from twelve countries—one diplomat and one physician from each—resulted in an international sanitary convention which came to naught because of the failure of most of the countries to ratify it. This and subsequent conferences were doomed to failure for a more fundamental reason, however: medical science was not yet sufficiently developed to deal with the problems under consideration; and the conference participants, doctors as well as diplomats, were totally ignorant of the nature and mode of propagation of the diseases they were discussing. At the Second International Sanitary Conference, held in Paris in 1859, there were not even any medical delegates present. The convention drafted at this conference was, to all intents and purposes, " stillborn ".

Other International Sanitary Conferences followed: in Constantinople in 1866, in Vienna in 1874, in Washington in 1881, in Rome in 1885, in Venice in 1892, in Dresden in 1893, in Paris in 1894, and again in Venice in 1897. Each of these resulted in a convention of limited scope. More significant for the present review is the fact that the need for an international health agency began to be felt: at the 1874 Conference a plan for a " permanent international commission on epidemics " was introduced, and at the 1881 Conference a proposal for a " permanent international sanitary agency of notification " was put forward.

When the XIth International Sanitary Conference opened in Paris in 1903, it had at its disposal a body of scientifically established and universally accepted facts about cholera, plague, and yellow fever. Thus, the first health conference of the twentieth century " marked also a turning point in the scientific study of epidemic diseases. Many of the fundamental problems had been solved, but it remained to translate scientific discovery into practical public-health measures." This conference unified and revised the previous sanitary conventions and combined them into a single instrument, the International Sanitary Convention of 1903, whose provisions related to cholera and plague.

It was also at this conference that plans for the first international health agency were formulated. A committee charged with

* Abridged from: World Health Organization (1958) *The first ten years of the World Health Organization*, Parts I and II (see page 285 of this number of the Chronicle)

studying a French proposal for an international health office recommended that such an office be created, that it be patterned after the International Bureau of Weights and Measures, and that it be located in Paris. Four years later, in December 1907, this recommendation became a reality when delegates of twelve States signed an agreement, in Rome, for the creation of the Office International d'Hygiène Publique (OIHP).

The OIHP

The structure and function of the OIHP warrant some description since they provided, to a certain extent, a precedent for those of the World Health Organization:

> The new office was . . . under the authority and control of a committee of delegates of member governments, and it was stipulated in its Constitution that these delegates should be " technical representatives " of their countries. However, this term was widely interpreted for, although most of the first members of the " Permanent Committee " were medically qualified, several were diplomats. States which had not signed the Rome Agreement could adhere to it on application, thus accepting the obligation to contribute to the budget of the OIHP and obtaining the right of representation on the Permanent Committee. The Constitution of the OIHP laid down that it should not in any way interfere with the national administrations, and proclaimed its independence from the authorities of the country in which it was situated. It also established its right to communicate directly with national health administrations.
>
> As its main function, the OIPH was to disseminate to Member States information of general public-health interest, and, especially, that relating to communicable diseases—notably cholera, plague, and yellow fever—and the measures taken to combat them. It was also to suggest improvements to the International Sanitary Conventions and to publish a monthly bulletin.

At first the OIHP was largely an European agency, but the ultimate adherence to the Rome Agreement of nearly sixty countries (some of which were not, however, sovereign States) gave it a more truly international character.

The early years of the OIHP's existence coincided with a period of scientific development and growth of the public health professions which made possible important advances in the control of some of the major communicable diseases. The minutes of the meetings of the Permanent Committee during these years furnished an excellent picture of the state of the public health sciences at the time, and the monthly Bulletin of the OIHP was a unique source of information on a wide range of public health subjects.

A report on the first major technical problem to be studied by the Permanent Committee gave rise to a question of principle which was to be discussed more than once by the World Health Assembly and the WHO Executive Board over forty years later. Dr. H. Pottevin, the Secretary-General, had prepared a comprehensive report on the destruction of rats on board ship and the prevention of their migration from ship to shore and *vice versa*; and, although his report was generally approved by the Committee, doubts were expressed as to the wisdom of publishing it since it was feared that the OIHP might thereby commit itself to certain responsibilities. The solution adopted was one to which WHO has also had recourse on many occasions: the report was sent in proof form to all delegates, and their observations were taken into account in preparing the final text.

The OIHP did not engage in field work, but it did provide an international information bureau and a forum for the discussion of public health problems. Among the subjects which it studied were deratting, yellow fever, plague, cholera, malaria, tuberculosis, typhoid fever, ankylostomiasis, cerebrospinal meningitis, sleeping sickness, the suppression of insect vectors of disease, food hygiene, the construction and management of hospitals, the hygiene of schools and workshops, and biological standardization.

By the time it was forced to suspend activities in 1914, on the outbreak of war, the Permanent Committee of the OIHP had prepared a revision of the International Sanitary Convention of 1903, which resulted in the International Sanitary Convention of 1912, the first to include yellow fever as a quarantinable disease. In addition, it had

made important recommendations to governments on a wide range of public health problems. Despite the suspension of activities, the Bulletin continued to be published regularly during the five years of war.

At its first post-war session, on 3 June 1919, the Permanent Committee of the OIHP heard, in an address by its President, Professor Rocco Santoliquido, a statement of international public health principles which were still considered valid, and even new, more than thirty years later. Professor Rocco Santoliquido said that the chief guarantee of international security against disease lay in the standard of public health of each national unit, and that the idea of erecting barriers against disease and the concept of quarantine were outmoded. Endemic foci of communicable disease should be circumscribed and obliterated, and such action presupposed a considerable and rational development of national health services. The health measures taken must be adapted to local circumstances, and what was suited to a large town would not be applicable to a small rural community. Further, it was not sufficient that the health services be developed and reorganized: the people must accept the necessity for the measures taken, and this meant that they must be aided, through education, to understand such measures.

These principles have become a " cornerstone of international health work ".

The Health Organisation of the League of Nations

Though the OIHP seemed destined for expansion, it was, in fact, to see its activities somewhat diminished because of the creation of a health organization within the framework of the League of Nations.

The Covenant of the League of Nations provided, in Article XXIII(*f*), that Members should " endeavour to take steps in matters of international concern for the prevention and control of disease ". Though there is no clearly stated reason in the published records why it was considered necessary for the League of Nations to concern itself with health matters when the OIHP was already functioning as an intergovernmental organization devoted to international health co-operation, several factors would seem to have played a part in the decision to include health in the Covenant. First, there was a general feeling that all international activities should be co-ordinated through the League. Secondly, the state of health of the world at the end of the war called for action on a scale for which the OIHP, with its small staff and modest budget, was ill equipped.

In late July 1919, at an informal meeting in London of delegates from France, the United Kingdom, and the United States and of representatives of the League of Red Cross Societies and of the OIHP, it was recommended that the OIHP should continue to exist but that it should be placed under the authority of the League of Nations. The Permanent Committee of the OIHP later agreed to this proposal.

At the request of the Council of the League of Nations, an International Health Conference was called in London in April 1920 to draft plans for a new, permanent, international health organization, and to deal with the emergency of epidemic typhus in Poland by preparing plans for " united official international action ".

The Conference recommended that a permanent international health organization be established as part of the League of Nations. This organization was to comprise an Executive Committee, an International Health Bureau, and a General Committee, the last to consist of delegates of Member countries of the League and of countries not Members but represented on the Permanent Committee of the OIHP. Subject to the consent of the signatories of the Rome Agreement of 1907, the OIHP was to become part of the new international health organization, and the necessary changes that this entailed were to be made in its constitution. This plan was approved by the Council of the League and, subsequently, by the first Assembly of the League, with one slight alteration, namely, that the " Executive " Committee became a " Technical " Committee.

With regard to its second purpose, the Conference expressed the opinion that the League was the " sole organization sufficiently strong and authoritative " to deal effectively with the typhus epidemic in Poland. While endorsing the measures already undertaken by the Polish authorities, the Conference estimated that additional supplies requiring an expenditure of more than three million pounds sterling were needed. The urgency of the situation made it imperative that the League's health work be started before all the members of the OIHP could agree to the Office's subordination to, and eventual absorption by, the new League health organization.

Accordingly, the Secretary-General of the League of Nations submitted, on 11 March 1921, to the President of the Permanent Committee of the OIHP a proposal for the establishment of a temporary Technical Committee, on which the Permanent Committee of the OIHP was to be represented. This proposal was rejected by the Permanent Committee at its April session, partly because of a communication indicating that the Government of the United States could not consent to any international organization of which it was a member being combined with the League of Nations. This decision meant that two autonomous international health organizations, one in Paris and the other in Geneva, were to function concurrently for more than twenty years.

The early attempts of the League to embark on health work were beset by legal complications, but with an important consequence: in an effort to secure the representation of the OIHP, if only in an advisory capacity, the first successful committee of the League was composed of members selected on the basis of technical qualifications rather than nationality. Of the twelve members of the Provisional Health Committee of the League, seven were also members of the Permanent Committee of the OIHP. At the fourth session of the League's Committee, in August 1921, the word " Provisional " was dropped, and the Committee became known as the Health Committee of the League of Nations. The principle of appointing a standing committee of health experts in their personal capacities did not survive the establishment of the Health Organisation of the League in its definitive form, but a similar principle was later to be used in the constitution of the Executive Board of the World Health Organization.

It was not until 1923 that the Health Organisation of the League of Nations actually began to take shape. In its ultimate form, it consisted of a General Advisory Health Council, a Health Committee, and a Health Section of the Secretariat of the League. The problem of adjusting to, and co-ordinating with, the OIHP continued to complicate the situation, though the OIHP " retained its largely nominal function as the General Advisory Health Council of the League's Health Organisation ".

International health work between two world wars

During the period between the two world wars, the OIHP maintained and, to some extent, developed its traditional functions. The Health Organisation of the League of Nations " sought opportunities for useful work by evolving new methods and extending the field of international health work to new subjects ".

One of the tasks of the OIHP was the revision of the 1912 Convention, which resulted in the International Sanitary Convention of 1926. In the new Convention the number of quarantinable diseases was increased to five by the addition of smallpox and typhus, and the OIHP assumed a more active part in international efforts to limit the spread of epidemics. Countries were required to notify the OIHP immediately of first cases of plague, cholera, and yellow fever, and of the appearance of typhus and smallpox in epidemic form; the Office was, in turn, to relay this information by telegram to all countries whose geographical situation or maritime relations placed them in danger. From such notifications a weekly communiqué was prepared. The OIHP also collected regularly from governments certain other information, which was later organized and

published as the *Annuaire sanitaire maritime international*. Two further publications were subsequently added to this: a *Relevé annuel* relating to the deratting of ships and ports, and a *Répertoire sanitaire maritime international*.

In 1928 the OIHP established a Pilgrimage Commission to examine the report on the Mecca Pilgrimage prepared each year by the Egyptian Sanitary, Maritime, and Quarantine Board, one of several regional organizations to which the Office delegated certain functions. In the same year the Permanent Committee began study of a question of rapidly increasing importance, i.e., quarantine regulations for air traffic. By 1932 the International Sanitary Convention for Aerial Navigation had been drawn up; this was signed by twelve countries in the following year, and came into force in 1935 when ten countries had ratified it.

In sum, the OIHP was principally concerned with the supervision and improvement of international quarantine measures. But its work also included other aspects of public health, notably the Brussels Agreement of 1924 regarding venereal diseases among seamen, the international standardization of anti-diphtheria serum, and the control of narcotic drugs. In addition, it collected information from member countries on many subjects and published it in its monthly Bulletin.

The Health Organisation of the League first directed its efforts towards meeting the emergency situation created by the epidemics which followed the war, particularly the typhus epidemics in Eastern Europe. It set up an Epidemic Commission to visit and advise the health authorities of affected countries and an epidemiological intelligence service to collect and publish data on epidemic diseases of international importance. It included in its *Weekly Epidemiological Record* the communiqués prepared by the OIHP. Because of the relative prevalence of the epidemic diseases in Asia, the Health Organisation established an Eastern Bureau in 1925.

A new approach to the international control of communicable diseases started in 1923 with the setting-up of the League's Malaria Commission, the purpose of which was not to prevent the spread of the disease from one country to another, but rather to study and advise on the best means of controlling malaria wherever it existed. One significant result of these studies was the introduction of totaquina as an effective but less expensive substitute for pure quinine.

In 1923 the Health Organisation also established a Cancer Commission, the work of which led to a series of annual reports on the results of radiotherapy in cancer of the uterus. Other technical commissions were eventually set up to study a wide range of subjects, including biological standardization, housing, physical fitness, typhus, leprosy, medical and public health training, rural hygiene, and unification of pharmacopoeias. Particularly outstanding was the Organisation's work on nutrition : in 1936 it published a report on the physiological bases of nutrition which attracted much attention and which can still be regarded as "a document of historic importance".

With the outbreak of the Second World War, international health work again all but ceased. However, the Health Section of the League dealt with requests for information to the extent that its limited resources permitted; several numbers of the *Bulletin of the Health Organisation* were published, among them some containing studies of special health problems created by the war; and publication of the *Weekly Epidemiological Record* was continued without interruption.

In May 1944, the two officers who constituted the nucleus of the Epidemiological Intelligence Service of the League of Nations Health Section were transferred to the United States to form a " research unit "—and later to organize an epidemiological intelligence service—in the Health Division of the United Nations Relief and Rehabilitation Administration (UNRRA). In January 1945 UNRRA took over the OIHP's duties with respect to the International Sanitary Conventions. UNRRA was a temporary organization created to deal with the devastation resulting from the war. One of its primary

concerns was public health; and the work of its Health Division in combating epidemics, administering the International Sanitary Conventions, providing essential medical supplies, and aiding governments of fifteen countries to rebuild and even improve their health services provided an invaluable link between pre- and post-war intergovernmental health activities.

Establishment of the World Health Organization

The period of the Second World War saw advances in medical science which were to revolutionize methods of controlling certain communicable diseases: the advent of penicillin and of DDT, in particular, was to transform the outlook for some of the major public health problems completely.

The importance of health in rebuilding world peace was recognized at the United Nations Conference held in San Francisco in 1945. A memorandum submitted by the Brazilian delegation led to the insertion in the United Nations Charter of health as one of the problems to be considered by the United Nations; and a later, joint declaration by the Brazilian and Chinese delegations recommended the early convocation of a general conference for the purpose of establishing an international health organization. Subsequently, the UN Economic and Social Council, as one of its first tasks, adopted on 15 February 1946 a resolution calling for an international conference to establish a health organization, and setting up a technical preparatory committee, composed of individuals chosen for their expert qualifications, to prepare an agenda and proposals for consideration by the conference. The Secretary-General of the United Nations was requested to call the health conference no later than 20 June 1946.

The accomplishments of the Technical Preparatory Committee, which met in Paris in March and April 1946, were considerable: in the course of only twenty-two meetings it drew up an annotated agenda for the conference, proposals—amounting to a draft—for a virtually complete constitution for the new health organization, and a series of relevant resolutions. It was this committee which proposed what was to become essentially the structure of the future World Health Organization and which threshed out details which greatly facilitated the work of the International Health Conference.

The International Health Conference opened in New York on 19 June 1946 and was in session for four and a half weeks. All fifty-one Members of the United Nations were represented, and thirteen non-Member States were also represented, by observers, on invitation of the Economic and Social Council.

The Conference's decisions resulted in: the Constitution of the World Health Organization; a protocol for the termination of the Rome Agreement of 1907 and for the assumption by the new Organization of the duties and functions of the OIHP; and the establishment of an Interim Commission to carry on the health work of former international organizations—the League of Nations Health Organisation, the OIHP, and UNRRA—until the coming into force of the Constitution. The Interim Commission was empowered to take any necessary action to further the solution of urgent health problems, and its final task was to make arrangements for convening the First World Health Assembly, including the preparation of the provisional agenda. The Constitution was signed by sixty-one States on 22 July 1946, but nearly two years elapsed before its final ratification on 7 April 1948. During this time, the Interim Commission more than fulfilled the duties and obligations assigned to it, and provided a solid foundation for the subsequent work of the Organization.

THE STRUCTURE AND WORKING METHODS OF THE WORLD HEALTH ORGANIZATION *

The task which faced WHO as a truly international health agency, intended to carry on the functions of its predecessors but to work on a much larger scale than any of them, was immense. It is greatly to the credit of those who drafted its Constitution that the structure and functions set forth therein have proved, in the course of the first ten years, to be so well conceived. It was essential to create a structure simple and flexible enough to adapt to changing needs and gradual expansion, and this the " founding fathers " succeeded in doing.

ORGANIZATIONAL STRUCTURE

The Health Assembly

To enable its Members, which now number 85 (plus three Associate Members), to have a direct voice in planning and financing world-wide mutual assistance in health programmes, WHO convenes an annual World Health Assembly. Each Member is entitled to be represented at the Health Assembly by three delegates, one of whom must be selected as chief delegate. The delegates are chosen for their technical competence in the field of health, and should preferably represent national health administrations.

The functions of the Health Assembly are: to determine the Organization's policies, to make recommendations to Member States, to approve a general programme of work and to give instructions or directives to the Executive Board and the Director-General, and to review and approve the budget. It elects the Director-General and chooses the States entitled to designate a person to serve on the Executive Board.

In addition, the Health Assembly has a certain quasi-legislative power which is new in international organization and which greatly facilitates the acceptance by governments of international health regulations with a minimum of delay: the Assembly is " empowered to adopt by resolution regulations relating to a broad range of specified technical subjects "; and these regulations come into force, within a stated period after notification of their approval by the Assembly, for all Member States except those which have indicated their rejection of them or their acceptance subject to certain reservations. This power has been employed by the Assembly in the adoption of the International Sanitary Regulations and of regulations regarding nomenclature with respect to diseases and causes of death.

The Executive Board

The Executive Board is composed of eighteen members, designated by as many Member States. Its members are selected on the basis of technical competence and exercise the powers delegated to them by the World Health Assembly on behalf of the whole Assembly, *not* as representatives of their respective governments. The Board members are, in effect, " the trustees of the Health Assembly ".

To ensure continuity in its work, the Board is subject to renewal by only one-third every year. However, Member States are eligible for re-election as States entitled to designate a person to serve on the Board (see Table 1). Every effort is made to provide a balanced geographical distribution of its members.

The Constitution empowers the Executive Board " to submit proposals and advice to the Assembly on its own initiative, prepare general programmes of work for approval by the Assembly, and take, or authorize the Director-General to take, any action required in an emergency, e.g., an epidemic or a calamity. It also exercises on behalf of the

* Abridged from: World Health Organization (1958) *The first ten years of the World Health Organization*, Part II (see page 285 of this number of the Chronicle)

TABLE 1. COMPOSITION OF THE EXECUTIVE BOARD, 1948 - 1957

Elected 1948			Elected 1949	Elected 1950	Elected 1951	Elected 1952	Elected 1953	Elected 1954	Elected 1955	Elected 1956	Elected 1957
For one year	For two years	For three years									
Australia	Brazil	Byelorussian SSR	Philippines	Chile	Belgium	Brazil	Austria	Burma	Argentina	Canada	Afghanistan
Ceylon	China	India	Sweden	France	Ceylon	Canada	Costa Rica	Chile	Ecuador	India	Australia
Iran	Egypt	Netherlands	Turkey	Italy	Cuba	Denmark	Indonesia	France	Finland	Italy	Egypt
Norway	France	Poland	United Kingdom	Pakistan	Greece	Iran	Iraq	Japan	Pakistan	Mexico	Federal Rep. of Germany
United Kingdom	Mexico	South Africa	United States of America	El Salvador	Lebanon	New Zealand	Switzerland	Saudi Arabia	Philippines	Syria	Liberia
United States of America	USSR	Yugoslavia	Venezuela	Thailand	Liberia	United Kingdom	United States of America	South Africa	Portugal	United Kingdom	United States of America
Composition 1948-49			Composition 1951-52			Composition 1954-55			Composition 1957-58		
	Composition 1949-50			Composition 1952-53			Composition 1955-56				
		Composition 1950-51			Composition 1953-54			Composition 1956-57			

* Elected for one year only to replace the Byelorussian SSR

Assembly any powers which the latter may delegate to it."

The Board meets twice a year, once in January and again a few days after the close of the World Health Assembly. At its January meeting it performs one of its more important functions: it studies the programme and budget estimates prepared by the Director-General and makes comments and recommendations regarding them for submission to the Health Assembly. The extent of the Board's authority in dealing with the Director-General's proposals was determined by a decision of the Second World Health Assembly, which laid down the following criteria, later re-formulated by the Fifth Assembly, for the Board's review of the annual budget estimates: the Board is required " to consider whether the estimates are adequate to enable the Organization to carry out its constitutional functions in the light of the current stage of its development, whether the annual programme follows the general programme of work approved by the Health Assembly, whether the programme envisaged can be carried out during the budget year, and the broad financial implications of the estimates with a general statement of the information on which any such considerations are based ".

The Executive Board also handles administrative matters of many kinds, has the authority to start action on the reports of expert committees, decides whether these reports should be published, and undertakes organizational studies requested by the Health Assembly. The Board's work is too varied and extensive to describe in detail here. Suffice it to say that as the Organization's activities expand in number and scope, so do the Executive Board's duties increase.

The Secretariat

The organizational structure of the Secretariat, the third organ created by the Constitution to carry out WHO's work, is the result of an evolutionary process which has been based on certain " well-recognized and widely accepted principles of organization and administration ". Chief among these principles were that this structure " should be developed around main functions; that main functions should be grouped in such a way as to produce a proper balance, avoid duplication and conflict of effort while ensuring that no area of work was neglected; and that . . . responsibility should be delegated to the utmost extent compatible with efficiency and the co-ordination of policy, and officials should be expected to exercise the maximum initiative within the authority delegated to them ". The main programme functions came to be grouped under two headings, with two departments named accordingly: the Department of Advisory

FIG. 1. REGIONAL STRUCTURE OF THE WORLD HEALTH ORGANIZATION

Services, which deals mainly with direct services to governments, and the Department of Central Technical Services, which includes the epidemiological intelligence and statistical services, biological standardization, the unification of pharmacopoeias, publication and reference services, and other activities of world-wide scope.

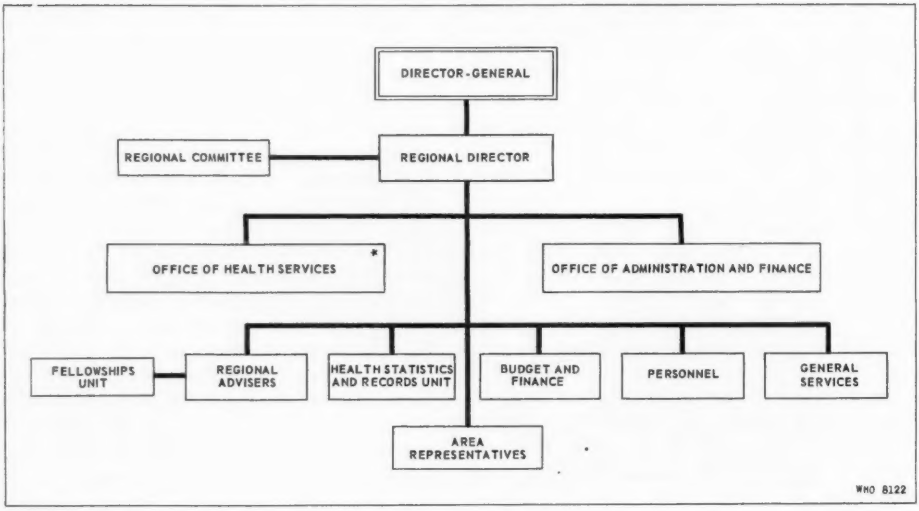
In the first few years of the Organization's work, direction was concentrated largely at Headquarters. Gradually, however, WHO's distinctive decentralization scheme began to take shape. Today the Organization has six regional offices: for Africa, the Americas, South-East Asia, the Eastern Mediterranean, Europe, and the Western Pacific (Fig. 1). While some of the functions formerly fulfilled by Headquarters have been assumed by the regional offices, co-ordination, top-level technical guidance, and financial control have remained the prerogatives of the central office in Geneva. The chief purpose of the regional offices is to provide effective contact between the Organization and the governments within each region. Since the six regions are very different from each other, the structure and working methods of the regional offices vary considerably. Nevertheless, they do all follow the same general pattern, and the structure of a typical office is shown in Fig. 2.

The staffing of an international agency such as WHO is not easy. Two considerations must govern the selection of personnel: technical competence and geographical representation. The two are sometimes difficult to reconcile. It is impossible for all Member States to be represented on the staff since in some countries the relative shortage of trained and experienced health personnel makes it essential to retain those that are available in the national or local health services. Another problem stems from the far-flung nature of the Organization's operations: it is especially difficult to maintain a sense of unity among a staff of diverse professional and national backgrounds when this staff is working in perhaps over a hundred places.

In brief, the WHO Secretariat is composed of a number of categories of staff, recruited from many countries:

> . . . These categories consist, broadly speaking, of the technical officers at Headquarters and at regional offices; the technical specialists appointed to give

FIG. 2. TYPICAL STRUCTURE OF A REGIONAL OFFICE



advisory and demonstration services to governments on the spot; the administrative officers; the locally recruited secretarial and general service staff; the short-term specialist consultants, either at Headquarters or in the regions and in the field; and finally temporary and *ad hoc* staff engaged for special purposes such as conferences. The staff has grown in numbers from some two hundred persons in 1948, mostly centrally located, to over one thousand five hundred in 1958, distributed in fairly equal proportions among Headquarters, the regional offices and the field. It comprises on the technical side medical and scientific officers, public-health engineers, nurses, health educators, veterinarians, statisticians and technicians; on the administrative side, language and library staff, information and liaison officers, legal, financial, personnel and other administrative officers of various kinds, and secretarial, clerical and operative staff.

WORKING METHODS

Preparing the programme

Once a workable organization had been established, the Executive Board and the Director-General turned their attention to drafting a suitable programme of activity—a programme encompassing as many of the Organization's constitutional functions as feasible within the limits of the available resources. Accordingly, a plan of work was developed which the Organization could carry out over a period of several years, in the light of current medical knowledge. This plan was based on five general principles: "(1) all countries and territories should take part in the Organization's work; (2) assistance to a government in the development of its health services should be supplied only on the request of the government concerned; (3) the services afforded should be calculated to foster national and local self-reliance and initiative and should be adapted to the environment; (4) the Organization should limit its efforts on behalf of research to stimulating and co-ordinating current efforts; (5) services should be available to all Member States".

Within the framework of a general programme based on the above principles, the Director-General drafts annual programmes and budgets. Regional organizations aid by assessing national needs, receiving government requests for assistance, and deciding on priorities among projects suitable for their regions.

Certain criteria have been established for determining whether a proposed activity should be rejected or accepted: WHO embarks only upon programmes considered internationally feasible; a country must be able to participate in the work and to continue it after WHO aid has been withdrawn; the activities should, as far as possible, be capable of yielding demonstrable results; the work should directly or indirectly benefit the largest possible number of countries and people; the qualified staff required should be available; a full preliminary study should be made before any commitment to action is accepted, account being taken of factors such as work already done on the same subject by WHO or another organization, the possibility of financial or other assistance from sources other than the United Nations and its specialized agencies, and whether or not WHO is the organization best suited to do the work. Consideration has to be given also to the world-wide technical services which only an international organization such as WHO can perform. In general, the Organization's activities come under two main headings: strengthening of national health services, and services of general, international interest.

The annual programme and budget estimates are prepared nearly two years before the calendar year for which the programme is intended. In the "planning year", the Director-General "sends to departments and offices at Headquarters and to each of the regional offices a directive on the various policy considerations to be taken into account in planning the programme, an indication of the tentative allocation of funds, and instructions on the form in which the estimates are to be prepared. In the same year the regional directors consult with governments and receive their requests for assistance." The regional programme is planned on the basis of these requests. The Director-General "reviews all proposals from regional offices and headquarters departments and

decides which activities are to be included in his proposed annual programme and budget estimates".

The proposed programme and budget estimates are subjected to a detailed examination by the Executive Board's Standing Committee on Administration and Finance, which makes suitable comments and recommendations to submit, with the programme and budget, to the World Health Assembly. The programme as approved by the Health Assembly is carried out in the following year.

Financing the work

The principal financial resources of the Organization are the contributions from Member States and the funds placed at its disposal under the United Nations Expanded Programme of Technical Assistance. In the early years of its existence, WHO had a grant from UNRRA and funds from the assets of the Office International d'Hygiène Publique. In recent years there have been contributions to a special fund for malaria eradication. The United Nations Children's Fund (UNICEF) has for many years met a large share of the expenses of projects in which the two agencies have worked together.

The contributions of Member States are determined by a scale of assessment patterned after that used by the United Nations. Funds made available under the Expanded Programme of Technical Assistance are a valuable source of income, but it is somewhat difficult to plan for health work under this programme since the amount that will be available for any year is accurately known only six months after the programme for that year has been considered by the Health Assembly. The working relationship between WHO and UNICEF will be discussed in more detail in a later section.

A government requesting WHO aid in a health project, whether in the form of advice, staff, fellowships, or, occasionally, some

TABLE 2. REGULAR BUDGETS, 1948-1958 [1]

Year	Budget level	Authorized expenditure level	Actual expenditure
1948 (four months)	4 800 000 [2]	4 800 000	3 935 537
1949	5 000 000	5 000 000	4 396 743
1950	7 501 500	6 300 000	6 269 777
1951	7 677 401	6 527 401	6 016 296
1952	9 182 332	7 782 332	7 602 019
1953	9 832 754	8 485 095	8 018 456
1954	9 838 000	8 497 700	8 134 514
1955	10 999 360	9 500 000	9 275 300
1956	12 074 144	10 203 084	9 982 794
1957	13 590 420	12 550 000	12 091 421 [3]
1958	14 769 160	13 566 130	—

[1] The difference between the "budget level" and the "authorized expenditure level" is accounted for by the need to make allowance for non-payment of contributions by inactive Members and slowness of payment by other Members.

[2] Including repayment to the United Nations of the $2 150 000 lent to the Interim Commission

[3] Subject to audit

equipment and supplies, is responsible for the project undertaken and provides resources in money, manpower, and material to an amount which usually increases as the project advances and which is several times the amount spent on the project by WHO. Because of its very limited budget, the Organization's assistance must be largely technical, not financial.

The regular budgets of the Organization for successive years are shown in Table 2.

The funds which WHO has obligated under the Expanded Programme of Technical Assistance are indicated below:

	US $	
1950-51	1 342 490	
1952	4 351 689	
1953	4 189 357	
1954	3 754 545	
1955	4 411 749	
1956	5 450 454	
1957	5 523 144	subject to audit

Co-operation with other organizations

WHO does not work alone: it has close working relationships with the United Nations and its various agencies and co-operates with other inter-governmental and non-governmental organizations.

The Organization's Constitution prescribes that it shall " establish and maintain effective collaboration with the United Nations, specialized agencies, governmental health administrations, professional groups, and any other appropriate organizations, and promote co-operation among scientific and professional groups which contribute to the advancement of health ". In agreements with the United Nations, the Food and Agriculture Organization (FAO), the International Labour Organization (ILO), and the United Nations Educational, Scientific, and Cultural Organization (UNESCO), provision is made for " reciprocal representation at meetings, the establishment of joint committees for special purposes (except in the case of the United Nations), the exchange of information and documents, the co-ordination of personnel arrangements (especially for the avoidance of competition in recruitment and for facilitating interchange of staff), and the co-ordination of statistical services, with a view to ensuring the maximum technical efficiency and the avoidance of overlapping ". WHO reports yearly to the United Nations Economic and Social Council and participates in a number of activities common to the United Nations and several of the specialized agencies.

WHO's collaboration with UNICEF has been particularly close. When the Fund was created in 1946, as an emergency measure to help meet the needs of children and adolescents in a war-devastated world, it was arranged that it should utilize as much as possible the staff and technical assistance of the specialized agencies. The Interim Commission seconded a full-time medical officer and a paediatrician to work with UNICEF and gave technical support to UNICEF's mass BCG-vaccination campaign.

In the early days of WHO, a UNICEF/WHO Joint Committee on Health Policy was set up to direct health work in which the two agencies would co-operate. According to principles laid down by this committee, UNICEF's role in health programmes " is to furnish, under its agreements with governments, the required supplies and services, while WHO will study and approve plans for all health programmes for which countries may request supplies from UNICEF. WHO will also be responsible for making available to governments, at their request, international health experts to help in drawing up plans of operation for UNICEF health programmes or for the implementation of any health programme." This position has remained essentially unchanged: today WHO provides the international health personnel and UNICEF the supplies in projects in which the two work together. UNICEF also defrays the costs of any international health personnel which could not have been foreseen at the time of preparation of the WHO budget estimates.

The achievements of WHO and UNICEF in their joint projects have been noteworthy and have covered practically every field of interest to child health.

Special mention may be made of WHO co-operation with two other agencies: the United Nations Relief and Works Agency for Palestine Refugees in the Near East (UNRWA), in the health programme of which the Organization has actively participated, and the United Nations Korean Reconstruction Agency (UNKRA), for which WHO has provided medical personnel.

Non-governmental organizations concerned with some particular branch of medical science or with other subjects of general interest to WHO may be admitted into official relationship with the Organization by decision of the Executive Board. This arrangement entitles the organization in question " to appoint a representative to participate, without right to vote, in WHO meetings and, on the invitation of the chairman, to address the meeting on a subject in which it has a particular interest "; to have access to certain documentation; and to submit memoranda to the Director-General. WHO benefits from these relationships in various ways—for example, through assistance in sponsoring conferences and other types of technical meeting.

Means to an end

Many of the means which WHO employs to accomplish its purposes have been used by previous health organizations or by private agencies rendering health assistance, though on a much smaller scale. These " means to an end " include projects, technical meetings, fellowships, co-ordination and co-operation among medical services and individuals, specific investigation and research techniques, and dissemination of information through publications.

Projects

Direct advisory services to governments are based on the administrative and technical unit known as the " project ". A project usually evolves as follows:

To meet a request from a country, the regional director negotiates with the national authorities to determine the form of international assistance to be supplied. A suitable expert or team is then recruited by the Organization and briefed on the purpose of the project, the conditions in the region and country, and the general administrative and technical procedures that the Organization has found useful in similar circumstances. The regional office assists in the necessary liaison and co-operation with the national counterparts and local services with which the expert or team will work. The international staff is assigned to assist the government, not to control the project; and the course of the project is thus determined by the local needs, environment, and epidemiological conditions.

A system of reports, to the national health administrations and to the Organization's regional office, ensures that the projects are properly developed or modified as circumstances change during their progress. When the international staff is withdrawn, the local services apply, extend and continue the work as necessary, so that it becomes an integral part of the national health services.

Most projects more or less become " local demonstrations " in which the international staff provides technical guidance, demonstrates particular techniques, and trains national counterparts to carry on and extend the work. In some cases the demonstration assumes the proportions of a " mass campaign ", making an all-out attack on a specific health problem (e.g., tuberculosis or the treponematoses), reaching as many people as possible within a relatively short time, and preparing local personnel to utilize the same procedures in other areas and to do follow-up work. Special types of demonstration (e.g., laboratory, clinical, and field demonstrations, and technical meetings and courses of various kinds) may be used to assist several countries from one or more regions with some common problem.

Technical meetings

Technical meetings are among the Organization's most valuable working tools. Such meetings may be either advisory or educational in nature. In the first category are meetings of study groups and of expert committees, drawn from the Organization's 36 expert advisory panels. These meetings provide " authoritative technical direction to the policies and programmes of the Organization ", afford an opportunity for an exchange of information, and suggest outlines

for co-ordinated research. The educational meetings usually take the form of conferences or seminars: the former are usually on a larger scale than the latter and serve chiefly the purpose of exchange of information; the latter normally are concerned with narrower subjects and result in some concrete conclusions on those subjects which may be generally disseminated.

Training methods

In addition to the aforementioned educational meetings and demonstration projects, WHO utilizes fellowships and training courses to carry out its education and training programme. The Organization has developed a comprehensive system of fellowships in which it acts largely as a co-ordinator: it arranges for fellows selected by governments to study in institutions in other countries where training is available that cannot be obtained locally. It also arranges for teachers to go to countries that need help in improving their educational facilities.

WHO, often with the aid of other agencies, sponsors short training courses on a wide variety of subjects and provides fellowships for trainees from different countries to attend; and, in collaboration with certain governments, the Organization assists in professional training courses in special fields, such as anaesthesiology.

Investigation and research techniques

WHO draws upon, and helps to co-ordinate, the medical resources of the world through co-operative arrangements among medical services and scientific workers everywhere. In certain fields it has established a network of laboratories for reference and exchange of information, in some instances paying annual grants to national institutions participating in international work or assisting in other ways, such as by facilitating an exchange of workers, or providing essential supplies. In other domains, the Organization uses research institutions made available to it by national authorities for conducting specific investigations.

Publications

Both in its general technical services for all countries and in its direct services to individual countries WHO uses publications to further its ends. Much of the Organization's work would be of little value, or even impossible, without the permanent record and means of diffusing and exchanging information afforded by its publications.

THE WHO FELLOWSHIPS PROGRAMME [1]

When the Interim Commission was formed in 1946 to continue the work of former international health organizations pending ratification of WHO's Constitution, it also took over the fellowships programme initiated by UNRRA. This programme has become one of the basic features of the work of WHO, and as Table 1 shows, the number of fellowships awarded annually has increased sevenfold in the eleven years from 1947 to 1957.

The main object of the fellowships programme is to provide selected health personnel with advanced training abroad, which is not available in their own countries and which is necessary for a specific assignment on return. In this way, technical skill and knowledge accruing or accumulated anywhere in the world is made accessible to others, and it is possible to build up in each country an elite of personnel highly trained in all categories of health work, who can undertake the training of their compatriots. Naturally, the selection of suitable candidates is all-important for the success of the programme, and certain guiding principles were recommended by the Expert Committee

[1] This article is based mainly on a review and appraisal of the WHO fellowships submitted by the Director-General to the Eleventh World Health Assembly. Further information on the fellowships programme will be found in the information booklet *WHO Fellowships* (Fifth edition, Geneva, 1958) and in the chapter on Education and Training in *The First Ten Years of the World Health Organization* (see page 285).

TABLE 1. ANNUAL DISTRIBUTION OF WHO FELLOWSHIPS BY SUBJECT OF STUDY, 1947-1957

Purpose of Study	1947	1948	1949	1950	1951	1952	1953	1954	1955	1956	1957	Total
HEALTH ORGANIZATION AND SERVICES												
Public Health Administration												
Public Health Administration	18	17	14	24	68	89	113	108	103	137	141	832
Hospital and Medical Care Administration	3	11	4	2	11	20	8	7	18	16	2	102
Hospital and Clinic Buildings	1	—	2	2	—	3	—	2	5	1	23	39
Medical Librarianship	—	1	—	1	1	5	2	—	1	3	4	18
Sanitation												
Environmental Sanitation	4	1	5	41	51	76	57	52	107	104	97	595
Housing and Town Planning	—	—	—	1	—	—	1	—	1	—	2	5
Food Control	—	—	—	5	1	4	13	7	15	4	10	59
Nursing												
Nursing and Midwifery	2	3	2	6	19	60	49	25	59	48	81	354
Public Health Nursing	3	6	3	48	17	25	33	22	25	44	42	268
Medical Social Work	1	3	—	—	2	1	—	—	3	1	1	12
Maternal and Child Health												
Organization of Maternal and Child Health Services	10	7	20	14	44	78	46	30	48	66	78	441
Paediatrics and Obstetrics	13	9	6	45	36	20	26	26	31	26	34	272
Other Health Services												
Mental Health	5	9	11	11	61	98	81	26	39	20	42	403
Health Education	4	2	—	1	9	12	9	9	21	24	36	127
Occupational Health	2	10	3	1	15	58	21	8	41	23	86	268
Nutrition	3	4	7	8	17	37	12	8	29	7	34	166
Health Statistics	4	1	—	7	59	22	21	42	49	39	54	298
Dental Health	1	4	3	2	7	7	4	2	6	13	17	66
Rehabilitation	3	6	7	6	30	45	15	18	11	16	37	194
Control of Pharmaceutical and Biological Preparations	—	1	—	1	4	9	2	5	8	11	10	57
Total	77	95	87	226	452	669	513	397	620	603	831	4570
	39 %	*42 %*	*39 %*	*57 %*	*68 %*	*59 %*	*57 %*	*56 %*	*61 %*	*65 %*	*59 %*	*59 %*
COMMUNICABLE DISEASE SERVICES												
Communicable Disease and Laboratory												
Malaria	1	3	25	15	16	38	57	40	72	51	49	367
Venereal Diseases and Treponematoses	4	6	27	45	19	64	35	31	23	8	14	276
Tuberculosis	8	13	28	31	55	59	94	73	81	45	57	544
Other Communicable Diseases	13	22	8	12	28	130	61	40	76	47	169	606
Laboratory	16	14	10	21	19	47	35	40	41	39	103	385
Chemotherapy, Antibiotics	1	2	—	3	—	8	10	1	—	—	—	25
Total	43	60	98	127	137	346	292	225	293	190	392	2203
	22 %	*26 %*	*44 %*	*32 %*	*21 %*	*30 %*	*32 %*	*31 %*	*29 %*	*21 %*	*28 %*	*28 %*
MEDICAL EDUCATION, CLINICAL AND BASIC MEDICAL SCIENCES												
Clinical Medicine												
Surgery and Medicine	18	23	6	12	28	37	28	25	30	37	57	301
Anaesthesiology	2	1	1	15	14	29	17	16	19	12	22	148
Radiology	8	7	—	—	1	3	7	3	5	5	17	56
Haematology	3	2	—	1	5	4	1	6	3	5	5	35
Other Medical and Surgical Specialities	34	19	16	9	13	41	34	18	22	14	24	244
Basic Medical Sciences and Education												
Basic Medical Sciences	14	21	12	2	5	9	8	10	12	16	33	142
Medical Education	—	—	4	4	7	5	4	16	16	22	19	97
Total	79	73	39	43	73	128	99	94	107	111	177	1023
	39 %	*32 %*	*17 %*	*11 %*	*11 %*	*11 %*	*11 %*	*13 %*	*10 %*	*14 %*	*13 %*	*13 %*
Grand total	199	228	224	396	662	1143	904	716	1020	904	1400	7796

on Professional and Technical Education of Medical and Auxiliary Personnel in 1950.[2] The Committee stressed the importance of training in public health and the need for the adequate recognition of the non-medical aspects of health protection, particularly nursing, environmental sanitation, education of the public, and the social aspects of medicine. It will be seen from Table 1 that during the last few years some 60% of the fellowships awarded have been for public health administration, sanitation, nursing, maternal and child health, and other health services. On the other hand, the number of fellowships given annually for study in clinical medicine, the basic medical sciences and medical education, which represented nearly 40% of the total in 1947, fell to 11% in 1950, mainly because of a reduction in clinical studies, and has remained at or near this figure ever since. Fellowships for study in communicable disease services have constituted around 25% of the total throughout the entire period under review, although the actual number awarded in 1957 was nearly nine times as many as in 1947.

The Expert Committee also recommended that in selecting candidates, preference should be given to " persons who, upon return from fellowship training, will assume positions of responsibility in teaching " and that " careful attention should be given to assurance that the Fellow will, upon return to his country, have the necessary facilities, equipment, and opportunity to work along the lines of his fellowship study." The extent to which these conditions are met, i.e. the use to which the fellow subsequently puts the knowledge he has required, is in fact the yardstick used to evaluate the success of the fellowship programme. Two years after the fellow's return home, a follow-up report is obtained, accompanied by a statement from the national health administration which requested the fellowship, and supplemented if possible by first-hand information from WHO regional and field staff. On the basis of this information, an evaluation note is prepared giving a positive or negative appraisal on about fifteen items, covering the fellow's studies, his employment, and the contribution he made to his country's health after his return.

Table 2 shows the results of the evaluation of 1053 fellowships awarded during the period 1947 to 1954. It will be seen that, taking all the countries together, 961 (92%) of the fellows were in employment that was considered appropriate to their studies, and that about one-third of these had gained promotion or been given additional responsibility; another 133 (14%) had been able to take up

TABLE 2. EVALUATION OF 1053 FELLOWSHIPS AWARDED BETWEEN 1947 AND 1954

	Number	%
1. Fellows whose employment was appropriate to studies	961 [a]	92%
With promotion, or more responsibility, in their former type of employment	323	34%
In a new activity for which training was obtained through the fellowship	133	14%
2. Fellows appropriately utilized who made one or more of the following contributions		
Informing others (participation in committees, writing articles, etc.)	615	64%
Training others (in-service and/or formal teaching)	751	78%
Introducing new methods in existing services	391	41%
Improving existing services	472	49%
Establishing new services (not available in community or institution)	223	23%
Conducting research, field, clinic or laboratory (published)	254	26%
Other forms of leadership (mostly indirect contribution towards improvement and expansion of services, organization of training and research, etc.)	60	6%

(% of 961 cases)

[a] The other 92 fellows include 8 who have not returned home, 10 undergraduates who failed in their professional studies abroad, 18 who have left the country, resigned or retired after returning home, and 20 whose employment is only indirectly related to their studies even though with promotion in some cases. The rest are either employed in an unrelated field or the findings were inconclusive.

[2] *Wld Hlth Org. techn. Rep. Ser.*, 1950, 22

a new type of activity as a result of their fellowship training. It is particularly satisfying to note that nearly 80% of the 961 fellows appropriately employed were engaged in some type of teaching activity, while more than 60% were participating in committees, writing articles, or passing on information in some other way. Two-thirds of the appraised fellows made three or more different types of contribution to strengthening the health services of their country.

It may fairly be concluded, therefore, that the results of the fellowships have, in the main, been satisfactory, and that the training given has generally been put to good use when the fellows returned to their own countries. As stated in *The First Ten Years of the World Health Organization*: "Fellows bring back new ideas and techniques which they pass on to others in their countries. They introduce new methods in existing services and make them more effective. They establish health services new to their countries, and they undertake research. Perhaps most important, a very high percentage of fellows are taking an active part in training programmes and thus passing on to others the benefits they have themselves received."

These results would not be possible, however, without the support and co-operation of Member States in selecting suitable candidates, in accepting fellows for training, and in providing the necessary facilities and opportunities for fellows on their return home. The Eleventh World Health Assembly, after considering the Director-General's report on the WHO fellowships programme, adopted a resolution in which it thanked "*all countries which have received WHO fellows, and all public health officials, academic teachers and research workers who, in institutions all over the world, are giving of their time to the training of WHO fellows, and without whose co-operation this large programme of international training and exchange of scientific information would not be possible.*"

The Assembly expressed its satisfaction with the efforts made to keep fellowships under constant review and to develop simple methods of appraisal, and invited the attention of all Member States to the need for further improvement in "the planning of requests, the selection of candidates, and the proper employment and full utilization of fellows on return."

Notes and News

Two impressions of WHO activities by independent writers

Voyage chez les vivants, by Pierre Gascar, Gallimard, Paris, 1958.

Doctors to the World, by Murray Morgan, Viking Press, New York, 1958.

To mark its Tenth Anniversary, WHO invited two independent writers—one an American free-lance author and journalist, the other a French novelist—to observe different types of WHO activities under conditions and in countries of their own choice, and to record their impressions. Apart from providing the facilities and the necessary introductions, the Organization took no part in the production of these two books.

Voyage chez les vivants, by Pierre Gascar, is not strictly speaking, a guide to the work of the Organization, nor even to the countries he traversed. It is, however, the log-book of an unusual journey of exploration through the Philippines, Thailand, Indonesia, Malaya, India and northern Africa, following in the track of the world's great diseases. Pierre Gascar—who was awarded the Prix Goncourt of 1953—set out with no more knowledge of medical and scientific practice than the ordinary cultivated layman. It is not his intention to give readers a superficial

education in the techniques used by the health workers he met; indeed, he has no hesitation in confessing more than once: " Je perds le fil des explications ". What he has to offer is the immediacy of his experience —the impact of some months' contemplation of human suffering in surroundings very different from his customary environment. The arbitrary interspersing of action, observation and reflection imposed by the diary-form he has chosen produces the fragmentary effect of real life. Like the medical teams he describes, he is concerned simultaneously with the destiny of man and the whereabouts of the next ford.

Along the course of his arduous journey Gascar records the impressions he received from seeing at close quarters the victims of leprosy, tuberculosis, malaria, yaws, bilharziasis, trachoma, cholera, plague, smallpox—and the ubiquitous poverty and malnutrition. Among his fine descriptions of scenes not often visualized by the inhabitants of more fortunate countries, occur brief and vivid pictures of a small clinic or a solitary doctor battling—to Gascar almost vainly—against the tide of disease and lethargy surging in from the surrounding jungle, desert or teeming eastern city. He appreciates only too clearly the obstacles to international health work posed by economic conditions, social customs, religions—even time and space; and one may feel at times that he is almost too disheartened by the enormity of the task. He does, however, supplement his awareness of these problems with many penetrating observations on what is being done to overcome them. He is fascinated, for example, by the intricacies of collecting and disseminating epidemiological information, by the absolutism of quarantine arrangements at the great ports of the East, and by the ingenious methods developed to gather in for treatment the malarial nomads of Somalia or the " untouchable " tuberculous of India without disrupting the pattern of their lives.

Sharing the daily routine of the health teams to whose work he pays sincere tribute, he enters even more closely into the way of life of the people native to each country. In original and striking terms he describes their appearance and condition and gives the feeling of their landscape—the misty pastels of Java, the ochre-coloured, buffalo-trodden dust of the Indian plains, the " inspired geology " of the Ethiopian mountains, or the Philippine archipelago sliding at its lowest point below the waves. His book holds the attention by its personal, autobiographical quality; it is a day-by-day account of a journey not merely through some of the less-hospitable quarters of the world but also towards a greater consciousness of the plight of many millions of human beings living there.

In *Doctors to the World*, as the title reveals, a very different approach is adopted. Murray Morgan is among those writers who have made a practice of immersing themselves temporarily in the concerns of some large project with the object of interpreting to the general public its aims and working methods. While Gascar identifies himself with the suffering peoples of the jungles and deserts he visits, Murray Morgan is concerned with those who come to assist them; he names and describes many of the staff-members he accompanies in their routine work; he reports through their eyes and often in their words. Gascar's book is a traveller's diary in the 19th-century literary tradition, filled with intensely personal reflections, illustrated solely by maps of his journeys, an exploration partly of places and peoples, partly of himself. Murray Morgan's is an objective survey; like the tourist of today he informs himself in advance of what is to be seen, efficiently covers the ground, and does not forget his camera. The writing of Gascar evokes a landscape of pain, famine and solitude against which WHO's battle with disease is waged—his Poe-like vision of the malformations of leprosy and yaws is not easily dismissed from the mind. Murray Morgan's description of leprosy in half a dozen matter-of-fact lines is that of a reporter who observes not only the lesions of the disease (to which he characteristically refers in clinical terms, taking his colour from the medical team with whom he is associating) but also the gay clothes and sociable, prosaic manner of the

lepers. This photographic method produces a comprehensive picture of how WHO staff are accomplishing specific tasks: the target, the difficulties, and the proportional achievement are realistically appreciated, whether the scene is the administrative complexities of Mexico's malaria-eradication programme or a tiny ill-equipped clinic improvised from a henhouse in the Andes.

For each chapter he selects a health problem typical of one large area of his 28 000-mile journey through Central and South America and Central and West Africa, concentrating, perhaps, on the more spectacular pursuits such as the hunting of rabies-bearing vampire bats, but nevertheless keeping fairly before the reader's eye the many other projects carried on simultaneously in the region. The book covers in some detail campaigns against malaria, kwashiorkor, rabies, yellow fever, bilharziasis, yaws and leprosy, and sketches both public-health education in the field and the epidemiological intelligence services of headquarters. The fundamental difference between WHO's policy and that of other health missions is well illustrated—namely, that the projects it undertakes are designed as far as possible on the spot, within the framework of local conditions, at the request of local authorities, to be eventually bequeathed to local health workers who have often been recruited and trained by the international staff.

The kind of story Murray Morgan tells will be familiar to anyone in, or on the fringes of, medical work. Of particular value to the lay reader, however, is the abundant carefully-digested factual information on clinical, laboratory and field-research aspects with which he supplements the lively anecdotes of his encounters. He is able to infuse interest into a textbook account of the life-cycle of schistosome flukes or a description of the routine procedures for egg-passage of influenza virus as successfully as he communicates his excitement on seeing the physical and moral transformation of a yaws-crippled child cured by a single penicillin injection. His style has the highly-readable fluency which characterizes many American magazines; even at its most extreme this style retains the useful function of allowing him to set a scene and populate it in the fewest words, often including a parenthetic morsel of *oratio recta*: " In Kaduna, the capital of Northern Nigeria, the District Medical Officer, Dr D. J. M. Mackenzie, O.B.E., a chunky, gray-haired, sports-loving Scot who has spent the past quarter-century in Africa (' this irritating, lovable country '), told me . . .". The journalist's habit of writing for an immediate and local audience has its drawbacks, however; esoteric references such as " He was a good straight-forward man and he looked like Roy Campanella " may soon lose their signification. Nor are other pitfalls of this kind of reporting always avoided—a too-apparent garnering of local colour, an occasional effort to inject animation (" He had just one facial scar and it was a beaut."), or a dying fall of sentimentality at the end of a chapter. Nevertheless, he gives a neat and rounded appraisal of the work of the Organization; a professional dexterity in handling technical explanation lends his picture solidity, and a friendly observation of people enlivens it. Both *Doctors to the World* and *Voyage chez les Vivants*, much as they differ in approach, are likely to attract and inform a considerable public.

People Like Maria

This recently released film was made for WHO by World Wide Pictures Ltd, London, to mark the tenth anniversary of the founding of the Organization, and to show something of the way in which it is helping to promote international public health.

As its title implies, *People Like Maria* is a document of human interest; it describes in three sequences how people in some of the less advanced areas of the world are becoming pioneers in the cause of health, thanks largely to the assistance and training facilities offered by WHO and other international bodies.

The first episode is the story of a young Bolivian nurse (" Maria " of the film's title), freshly graduated from a WHO training course, whose task is to establish a maternal and child health centre in the wastes of the

Altiplano—a wind-swept plateau almost 14 000 feet high in the Bolivian Andes. Her brave and unflagging efforts to allay the suspicion and animosity of the local Indian population and her eventual success in winning their confidence and persuading them to take advantage of the services offered are depicted against a background of poverty, ignorance and desolation in one of the world's most inhospitable areas.

The second sequence relates an incident which occurred recently in Northern Nigeria. As part of the activities connected with a WHO malaria control project, an area of some 300 square miles was sprayed with dieldrin in an effort to combat *Anopheles gambiae* infestation. After a time, the number of mosquitos killed by the insecticide began to diminish, and when the malariologists in charge applied tests for susceptibility to anophelines captured in the sprayed area, they were disquieted to find that the tolerance of these mosquitos for dieldrin had risen eightfold. The impact of this discovery on the malaria workers concerned can readily be appreciated, since never before had insecticide resistance been reported in African anophelines.

For the third and last episode, the scene shifts to yet another part of the world—to a Burmese village, where a young rural health worker has been sent after finishing his period of training at a school in Rangoon, which was set up with the assistance of WHO shortly after the war. His initial timidity before the village elders gives place to self-assurance as soon as he realizes that his advice and help on all sorts of health problems are so badly needed by the local population. One day, during a tour of the area assigned to him, he comes upon a mysteriously depopulated village. His bewilderment quickly changes to alarm when the discovery of a dead rat leads him to suspect, quite rightly, that an outbreak of plague has stricken down the villagers. Thanks to his speediness in informing the local health authorities, the machinery of plague control is put into operation without delay, and a probable major epidemic is averted.

People Like Maria runs for approximately 50 minutes and is available in three versions—English, French and Spanish. Inquiries regarding its distribution should be addressed to: The Visual Media Officer, Division of Public Information, World Health Organization, Palais des Nations, Geneva, Switzerland.

WHO in the service of international nursing

In commemoration of the tenth anniversary of WHO, the April number of the *International Nursing Review*—the journal of the International Council of Nurses—contains a " World Health Organization Symposium ", devoted mainly to the work that the Organization has been doing to strengthen nursing services throughout the world. Each of the six WHO regions is dealt with in a separate article. As one article points out " each country has its own unique health needs which must be considered when planning programmes ", but it is clear that the basic problems facing the regional offices when they were set up were the same everywhere: a shortage of nurses and a low standard of nursing education. The position has improved greatly over the past ten years, but in some areas—particularly in the Western Pacific and South-East Asia Regions, where the shortage of nurses was most acute—it will be necessary for WHO to continue to provide nurse tutors to assist in basic training for some time to come. In other more favourably placed regions, notably the European Region and the Region of the Americas, WHO assistance is being directed more towards the provision of post-graduate training and refresher courses for nurses to equip them for nursing specialties and administrative posts. Attention is also being given to improving the status of the nurse in the community, encouraging professional self-determination, and securing adequate representation for nurses on health administrations. In this way it is hoped to attract more young women to the nursing profession and to raise the standard of nursing education.

Death of Professor Andrija Štampar

Only two weeks after the closure of the Eleventh World Health Assembly, news was received of the death of the Assembly's first president, Professor Andrija Štampar of Yugoslavia, following cerebral haemorrhage. A man of great distinction in international health work, he rendered outstanding service to his own country, particularly in the fields of preventive and social medicine, and in public health administration.

Professor Štampar was born in Croatia in 1888 and received his medical training at the University of Vienna, where he qualified in 1911. When the new kingdom of Yugoslavia was created after the First World War, he became its first director of public health in 1919. With his dynamic personality and his advanced ideas, he introduced many reforms, creating and organizing a network of health services with health centres as the basic field units. He remained at the Ministry of Health until 1931, when he was elected Professor of Hygiene and Social Medicine in the School of Public Health which he had established with the help of the Rockefeller Foundation at the University of Zagreb. Under his guidance, this school became a post-graduate medical training centre for the whole country, with emphasis on social medicine and hygiene.

Professor Štampar's outstanding abilities as a public health administrator and teacher soon attracted attention outside his own country, and in 1924 he was invited by the director of the Health Organization of the League of Nations to take part in the work of various committees and commissions. Later, he was a member of the Health Committee of the League, and in 1931 he took part in the European Conference on Rural Hygiene. From 1933 to 1936 he served the League of Nations in China, where he assisted in reorganizing and developing the public health services. After a visit to the USSR in 1936, he spent a year at the League of Nations headquarters in Geneva, making a study of problems connected with the organization of schools of public health in the European countries and of maternal and child health services. Subsequently, he made a lecture tour of the United States of America, and in 1938 he was appointed Rosenberg Professor at the University of California. On the outbreak of the Second World War he returned to Yugoslavia to resume his post as Professor of Hygiene and Social Medicine at the University of Zagreb. In April 1941, however, the war compelled an interruption of his work, but when the armistice was concluded in May 1945 he was again reinstated and at the same time appointed Director of the School of Public Health, a post which a held until his death. In recognition of his long and distinguished service to the School, the Yugoslav Government has decided that it shall be known in future as the "Andrija Štampar School of Public Health".

Since 1947, Professor Štampar had been President of the Yugoslav Academy of Sciences and Arts, which greatly expanded its activities under his stimulating leadership. In 1952, he was elected Dean of the Medical Faculty at Zagreb. Once again his energy and initiative were apparent, and he immediately set about improving the system of medical education. One of his most significant reforms was the establishment of a Division of Nursing at the Medical Faculty; at the same time, the former School of Nursing at Zagreb was raised to the rank of an institution of secondary education.

Professor Štampar's experience of international health work soon brought him into a position of eminence after the war, when the first steps were taken towards setting up an international health organization under the United Nations. He was elected the first Vice-President of the Economic and Social Council of the United Nations early in 1946, and appointed a member of the Technical Preparatory Committee for the creation of the World Health Organization. When the Interim Commission was formed in June of the same year to assume the functions of WHO pending ratification of the Constitution, Professor Štampar was elected Chairman. He thus played a very active part in founding and shaping the new organization, and it was a fitting tribute that he was elected

President of the Assembly when it met for the first time in 1948. As a member of the Yugoslav delegation, he put forward numerous constructive proposals at subsequent sessions of the Assembly, and he also represented Yugoslavia on the Executive Board.

The death of Professor Štampar robs international medicine of a great physician, a forceful administrator, and an impressive personality. He was a man of high ideals and immense determination. Coupled with his temperamental nature, these qualities sometimes made him impatient of opposition. But he was not proud, and always acknowledged the debt he owed to his early upbringing among a rough, peasant people, as well as to those who had helped him in later years. In accepting the award of the Léon Bernard Foundation prize in 1955,[1] he said: "When remembering the past ... I know that I could have done nothing for the promotion of social-medical activities without those who have supported me in this task: without my teachers; without the help given me by my country ...; without international collaboration; and without the people, among whom I live and whose health has been the concern of my life. My gratitude goes to all my collaborators, because little could have been achieved without their help."

[1] *Chron. Wld Hlth Org.*, 1955, **9**, 203

Review of WHO Publications

The First Ten Years of the World Health Organization, Geneva, 1958, x+538 pages, illustrated. Price: £1 5s., $5.00, or Sw. fr. 15.—. Also available in French and Spanish.

The past ten years have been marked by many significant advances in public health. Discoveries in the laboratory have made available new weapons for the attack on disease. The scope of public health has increased and, concurrently, international co-operation in health activities has become more extensive and probably more effective than ever before. It is within this context that the World Health Organization has completed its first ten years, and the volume now published not only serves as a record of WHO's work but at the same time reflects many of the noteworthy developments of the decade.

The book begins by reviewing some of the main events in international public health over the last hundred years. The functions of earlier health bodies, such as the Office International d'Hygiène Publique and the Health Organisation of the League of Nations, are described, and there follows an account of the various steps in the establishment of WHO and an explanation of its structure and working methods. It is pointed out that WHO, in taking over from some of the earlier bodies the more traditional type of health service—obligations in international quarantine, epidemiological intelligence, biological standardization, publications, etc.—benefited at the same time from the experience its predecessors had acquired.

The new organization, however, was given by its founders much more extensive responsibilities than the earlier bodies possessed. One of its primary aims is to strengthen the health services of countries and territories through advice and assistance, and the volume contains numerous examples of the projects of direct assistance undertaken for this purpose.

In an introductory chapter to the major section of the book, the principal mechanisms which WHO uses to fulfil its functions are described, the particular problems of each of the six regions are briefly discussed, and some significant trends of the decade are noted. Then, in twenty-three chapters, ten years of work are summarized under the following headings: malaria, tuberculosis,

venereal diseases and treponematoses, virus diseases, zoonoses and veterinary public health, and other communicable diseases; international quarantine, epidemiological and statistical services; atomic energy in relation to health; environmental sanitation, nutrition, mental health, health services and medical care, maternal and child health, health education of the public, education and training, and nursing; pharmaceutical standards and nomenclature, biological standardization, addiction-producing drugs, and health laboratory methods; publications and reference services, and public information.

The narrative is supplemented by a series of annexes containing useful background information. They include the text of the Constitution; a list of Members and Associate Members; participants in the Technical Preparatory Committee and International Health Conference, which prepared the way for the establishment of WHO; membership of the Interim Commission, and principal officers of the World Health Assembly and the Executive Board; lists of expert advisory panels and committees, technical meetings, and non-governmental organizations in official relations with WHO; distribution of fellowships; data on staff; income and expenditure tables.

The interest of the volume is enhanced by several maps and charts and 28 pages of photographs. These last include portraits of some of the personalities closely associated with the development of WHO, as well as pictures of headquarters, the regional offices, and aspects of the Organization's work. There is also an index.

An exceptionally modest price has been fixed for this book in order to make it as widely available as possible.

Ten Steps Forward: World Health 1948-1958, by Ritchie Calder, Geneva, 1958, 68 pages, illustrated. Price: 2s. 6d., $0.50, or Sw. fr. 1.50. Also available in French and Spanish.

In this booklet for the general reader, Ritchie Calder uses an ingenious device to describe the progress of international health since WHO was founded ten years ago. For each year of the Organization's existence, he has selected a story illustrating an aspect of WHO's work, being content simply to relate the facts and leave the reader to draw his own conclusions. As Dr M. G. Candau, Director-General of WHO, states in a short epilogue, these stories " show the measure of success the Organization has achieved, the handicaps it has faced, and the experience it has gained. There is no boasting of achievement because whatever we may have succeeded in doing is insignificant compared with what remains to be done. On the other hand, we like to think that we have made a virtue even of our mistakes. Like the achievements, they are the substance on which we build for the future."

The stories deal with: the Egyptian cholera epidemic of 1947-48; the organization by a WHO sister-tutor of training for nurses in Ethiopia, Borneo and Cambodia; the publication of the *Pharmacopoeia Internationalis*; the organization of maternal and child welfare services in South-East Asia; antituberculosis work in under-developed countries; steps to prevent protein malnutrition in children; the appearance of DDT-resistance in mosquitos; the health hazards involved in the peaceful uses of atomic energy; the control of virus diseases; the use and abuse of drugs in mental health treatment.

The 24 pages of photographs complement rather than illustrate the text. They are arranged in a series of picture stories, each complete in itself, showing: the treatment of yaws in Nigeria and leprosy in Burma, the world-wide attack on malaria, the rehabilitation of poliomyelitis victims in Japan, and the work of a Greek orphanage.

Publications of the World Health Organization, 1947-1957: A Bibliography, Geneva, 1958, 128 pages. Price: 17s. 6d., $3.25, or Sw. fr. 10.— Published in English and in French.

Although the publications of the World Health Organization represent a negligible proportion of the world's periodicals, books

and pamphlets on medical and public-health subjects, they nevertheless occupy a unique place because of their international character. A special effort is being made not only to render individual publications authoritative in the technical sense, but also to make them as representative as possible in the aggregate of the various schools of thought in different countries. For those who might ask themselves: " Is there, in my particular sphere of interest, any international study indicating the general trends of thought in other countries? " WHO has prepared a bibliography of everything published by the Organization between 1947 and the end of 1957.

Almost 2000 items, comprising technical, general and administrative articles and publications, are serially numbered and grouped in alphabetical order by subject, the headings used being based upon those employed in the *Current List of Medical Literature*, Washington, D.C, and supplemented by author and country indexes. Most of the works thus catalogued are available—like the *Bibliography* itself—in both English and French, while some also exist in the other official languages of the Organization—Chinese, Russian or Spanish. To help the reader find his way in the selection of material of interest to him, the principal features of each of the WHO publications are described in the Introduction; and the checklist of titles in the various series, will also be of use here. This volume demonstrates WHO's policy of preserving a closely systematized documentation of its programme and functions.

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